

THE

INDIAN CENTRAL OILSEEDS COMMITTEE

The Fourth Annual Report

OF

The Indian Central Oilseeds Committee

FOR THE

Year Ending 31st March 1951

February, 1952
NEW DELHI

CONTENTS

CHAPTER I

Meet

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as on 31st March 1951 is given in *Appendix II.*

Administration.

Shri K. C. Chetty, B. Sc., (Edin) continued as Secretary up to the 28th November 1950 when he was appointed as Under Secretary to the Government of India in the Ministry of Food and Agriculture. In his place Shri T. S. Krishnamurti was appointed from the 29th November 1950 and held the post for the rest of the year. Shri S. N. Sinha, BSc., continued as Marketing Officer in the Committee. Shri D. D. Suri, B. Sc., (Agri.) joined on 8th November 1950 as Special Officer in charge of the Committee's scheme for a survey of the position and possibilities of cultivation of Tung oil trees in India.

Accounts.

The receipts from cess on oils and oilseeds during the year under report amounted to Rs. 14,75,716/- as against Rs. 17,41,399/- of the previous year during which large arrears of custom duties for previous year were recovered. The expenditure during the year 1950-51 was Rs. 3,78,349/1/7 as against Rs. 2,60,584/- of the previous year.

The annual accounts of receipts and expenditure for the year 1950-51 are given in *Appendix III.* These have not yet been audited. In accordance with the orders of the Government of India, the accounts of the Committee will be audited by the out-side Audit Department of the Accountant General, Central Revenues.

CHAPTER II

Meetings.

Two meetings were held during the period under report. The Third Annual General and Sixth Ordinary Meeting was held in April 1950, and the Fourth Annual General and Seventh Ordinary Meeting in March 1951. Both the meetings were held in New Delhi under the Presidentship of Sardar Datar Singh. Meetings of the various Sub-Committees except the Local Sub-Committee were held in conjunction with two meetings. A special meeting of the Marketing Sub-Committee was held on the 13th September 1950 to consider the Forward Contracts (Regulation) Bill, 1950, and also the situation arising out of the ban imposed by the Saurashtra Government on the export of vegetable oilseeds and oils from Saurashtra to other parts of India.

At these meetings, besides reviewing the progress of work done during the previous years, the Committee considered and sanctioned

various schemes of research and development and made recommendations on a number of questions relating to the production and marketing of oilseeds and their products and the development of the oil crushing industry in village ghanis and power mills. A brief account of these activities is given in the following chapters.

CHAPTER III

AGRICULTURAL RESEARCH & DEVELOPMENT

A Completed schemes :

(i) Manurial expriments with groundnut cake.

The scheme was started in 1943 in Hyderabad and terminated in April 1948. It has led to certain practical results which are expected to be published shortly.

(ii) Pests and diseases of til and other oilseeds.

The scheme commenced in August 1943 in Uttar Pradesh and ended in June 1951. It has led to certain control measures against the more important pests and diseases affecting these crops and these are expected to be published shortly.

(iii) Research on pests and safflower.

The scheme was started in April 1945 in Bombay and it terminated in June 1950. It has led to certain practical results for the control of the pests but these are awaiting confirmation by large scale trials before publication.

(iv) Research on the pests and diseases of castor and other oilseeds.

The scheme was initiated in 1943 in Hyderabad and terminated in June 1947. A leaflet incorporating the results of practical value has been sent to the Indian Council of Agricultural Research for publication in the Indian Farming. A fresh scheme for the trial of the practical measures in cultivator's fields on a country-wide scale has recently oeen sanctioned *vide*. Chapter III. (c) (8).

(v) Research on storage of groundnuts.

The scheme was started in 1943 in Madras and terminated in 1947. A leaflet showing the practical results achieved including instructions for the proper storage of groundnuts has been printed and widely distributed.

(vi) Resear h on pests and diseases of groundnut.

The scheme was started in 1943 in Madras and terminated in

1947. It has led to results of practical value which have been written up in popular form and given wide publicity. On the basis of these results, a fresh scheme for large scale application of the measures has been sanctioned by the Committee. The particulars of the new scheme were given in the Committee's Annual Report for the year ending 31st March 1950.

B. **Schemes in progress :**

1. Linseed Breeding Scheme, Punjab (Kangra)—Progress report for the year ending 31st June 1951.

The scheme is located at Nagrota in Kangra District, Punjab, and was started in April 1949. It is due to terminate in March 1954.

The breeding and agronomic trials conducted during the year under report have provided the following important results :—

(*i*) In the yield trials conducted at the Linseed Breeding Sub-Station, Nagrota and Mangowal, the variety K-2 has established, beyond doubt, its superiority over the local variety. K-2 gave 5.38 maunds (111.6 per cent) and 2.77 maunds (179.8 per cent) more yield per acre than the local variety at Nagrota and Mangowal, respectively. The additional income per acre in favour of K-2 worked out to Rs. 127-1-0 and Rs. 61-12-0 per acre at Nagrota and Mangowal respectively. In the trials conducted on cultivators' land also, K-2 gave a very good account of itself, its average yield in four places being 2.62 maunds (91.9 per cent) more than the local linseed. In these trials the crop was sown in the standing rice crop according to the local practice in Kangra Valley.

(*ii*) Trials conducted between K-2, 235 strains of hybrid origin evolved at Nagrota and 33 varieties supplied by the Head of the Division of Botany, Indian Agricultural Research Institute, New Delhi, failed to show any strain significantly superior to K-2 in yield.

(*iii*) The manurial trial on K-2 variety revealed that the yield of linseed increased progressively with the increase in the dose of nitrogen from ammonium sulphate, the average excess in yields over control in case of 20, 30 and 40 lbs. N being 1.23, 2.31 and 3.26 maunds per acre respectively. These doses gave an additional income of Rs. 11-9-0,

Rs. 28-12-6 and Rs. 43-2-2 per acre, respectively, as compared to control.

(iv) In the seed rate trial on K-2 variety with 15, 18 and 21 seers seed rates, the yield increased progressively as the quantity of seed used per acre went up. Even after deducting the cost of seed, there was an additional income of Rs. 26-6-0, Rs. 90-12-0 in case of 18 and 21 seers seed rates repectively, as compared to the seed rate of 15 seers per acre.

(v) In the rotational trial, K-2 gave 2.45 maunds (45.8 per cent) more yield when sown after maize crop than when sown after rice crop. In this case the additional income worked out to Rs. 61-4-0 per acre when it succeeds maize as compared to when it succeeds rice.

(vi) In the progeny row trial of sesamum the local types gave good performance as compared to T4, T5, T15 and other strains of hybrid origin. Strain Kangra-2, a selection from local sesamum of Kangra Valley, appears to be particularly full of promise on account of its high yield, bold grains and bright white colour of seeds.

2. *Scheme for inducing mutants with desirable economic characters in til (sesamum), rape and mustard by X-rays. Annual report for the year 1950-51.*

The scheme is located at Calcutta in the Bose Research Institute and was started in April 1950. It is due to terminate in March 1953.

The results of the experiments so far conducted indicate that some of the types experimented with, both in Sesamum and Brassica, are better suited to the environmental conditions in West Bengal than the others. Greater attention will be given to these types during the next season.

A rough estimate of the doses necessary for inducing the maximum variations in the X-rayed progenies has been obtained.

Certain individual plants were obtained in the treatments which had a greater number of fruits than in the controls. These will be tried during the next season without any further treatments.

Earliness has been noticed in several of the treatments. These will also be tried during the next season to find out their behaviour

3. *Scheme for the improvement of groundnut crop in the Punjab (India). (Report for the year ending 30th June 1951).*

The scheme is located at Samarala (Ludhiana District, Punjab). It was started in April 1949 and is due to terminate in March 1954.

The breeding work being pursued under the scheme for selection of improved strains, has furnished very interesting results in so far as out of fifty-five single plant selections with spreading habit of growth nineteen selections gave higher yield than the standard Local Samarala, the difference in their favour ranging from 27.48 per cent to 59.65 per cent. Similarly, out of eighteen single plant selections with erect and bushy habit of growth, six out-yielded the spreading variety, Local Samarala by margins ranging between 8.65 per cent and 19.23 per cent.

In the yield trials conducted with six erect and bushy varieties, the variety Phillipine pink gave the highest yield of 17.21 maunds per acre against 15.59 maunds given by Punjab Groundnut No. 1 kept as standard, but the difference was statistically not significant. The variety Phillipine pink out-yielded all varieties in the trial last year as well. It has also been found to possess higher oil content than Punjab Groundnut No. 1. In the trial with spreading varieties, seven varieties *viz.*, A. H. 14, Gangapuri, Chikodi, Punjab Groundnut No. 1, F.15 and No. 3 gave significant higher yield of pods than the Local Samrala kept as standard. In the trials with bold-seeded table-varieties, no variety gave significantly higher yield than Punjab Groundnut No. 1 kept as standard, but variety A 2 out-yielded by a narrow margin and three varieties *viz.*, D. 5, Cyprus and Aut, proved almost at par with the standard.

As in the previous year, the manurial trial carried out during the year under report has once again proved that the application of inorganic nitrogenous fertilizers, ammonium sulphate and ammonium phosphate increased the yield per acre of pods under Samarala conditions by very big margins. The increase in yield realised in case of ammonium phosphate amounted to 171.5 per cent as compared to control whereas in case of ammouium sulphate the increase was of the order of 121.9 per cent. From the economic point of view, manuring with 25 lb. of N 2 per acre from ammonium phosphate resulted in a net profit of Rs. 333.51 while the corresponding increase in the case of ammonium sulphate amounted to Rs. 231.1 per acre.

Spacing experiments carried out with spreading and bunch varieties have once again revealed the usefulness of adopting closer spacing with a view to realising high yield of groundnut. In the case of spreading variety, the spacing of 12"x9" gave the highest yield of

18.17 maunds per acre, while in the case of bushy variety the spacing of 9"x6" gave the highest yield of 11.35 maunds per acre. The economics of these trials has divulged the fact that closer spacing remains more economical even after duly accounting for the cost of the additional seed used in such cases.

Growing of spreading variety of groundnut in a pure state has been found to be more economical than growing it in admixture with other *kharif* crops like *guara, bajra*, sesamum and *mung*, while in the case of bushy variety sowing of two to three rows of groundnut after every row of *mung* gave slightly higher cash return per acre than pure groundnut.

Chemical studies carried out on seventy-seven varieties of groundnut have shown that their crude fat percentage ranges between 45.4 and 51.3. Manuring of groundnut with any of the organic or inorganic fertilisers produced no adverse affect on the crude fat percentage of the seed. Variations in spacing seem to have no effect on the crude fat percentage.

Spraying groundnut crop with Bordeau Mixture (2:2:40) has been found to be very effective in controlling the spread and incidence of tikka disease under Samarala conditions and has consequently resulted in raising the yield of pods by 174.2 per cent and 120.9 per cent over control with two sprayings and one spraying, respectively.

4. *Castor seed distribution scheme, Hyderabad—Progress Report.*

The scheme is located at Himayat Sagar Farm in Hyderabad. It was started in 1946 and is due to terminate in March 1954.

The following quantities of seed were produced during the period 1950-51.

(a) H. C. 1. 9 lb. selfed seed and 1000 lbs. 2nd generating seed.

(b) H. C. 6. 30 lbs. of selfed seed and 80 lbs. of 1st generation seed 300 lbs. of 2nd generation seed.

2,946 lbs. of 2nd generation seed of H. C. 1 produced in 1949-50 was distributed over 200 acres which was the reserve area for 1950-51. The produce from this reserve area has not been procured as the strain is not gaining sufficient popularity and hence it has been decided to lay emphasis only on H. C. 6 as already approved in this extension proposals.

5. *Scheme for multiplication and distribution of improved strains of groundnut—Madras.*

The scheme which is located at Tindivanam in Madras was started in July 1948. It is due to terminate in June 1953.

8,650 lbs., 1,820 lbs., and 1,255 lbs. of picked pods of improved strains of groundnut *viz.*, T. M. V. 1, T. M. V. 2 and T. M. V. 3, respectively, were produced at the Government Farms and most of the seeds have been distributed to the primary seed farms during the year 1950-51. From the particulars received from the districts regarding the spread of the improved strains, it is estimated that the total area grown under the improved strains in 1950 was 1,08,000 acres.

C. New schemes sanctioned

The following agricultural research schemes for evolving new varieties, adoption of improved cultural practices and of measures to control pests and diseases and for seed multiplication and distribution of improved varieties, etc., were approved by the Committee and recommended for sanction :—

I. *Evolving improved varieties.*

(1) *Scheme for improvement of the brassica crop in Punjab.*

Under this scheme, research is to be undertaken to evolve improved strains of self-sterile forms of brassica *viz.*, brown sarson and toria. Manurial trials and experiments on seed rate and time of sowing will be conducted on these crops.

The net recurring expenditure on the scheme to be shared by the Committee and the State Government on a 75:25 basis is estimated at Rs. 48,506/- for a period of three years.

(2) *Scheme of research on oilseeds in Uttar Pradesh.*

This scheme envisages work on the improvement of linseed, mustard, groundnut, til and castor.

The net recurring expenditure to be shared by the State Government and the Committee on a 50:50 basis is estimated at Rs. 1,97,772/- for a period of five years.

(3) *Scheme for conducting research on Brassica in Assam.*

This scheme is designed for work on evolving improved strains of brassica in Assam. The work includes cultural, manurial and rotational experiments.

The entire cost of the scheme estimated at Rs. 61,224/- spread

over five years will be met by the Committee as a special case.

(4) *Scheme for oilseeds research in West Bengal.*

The general object of the scheme is to breed suitable types of the more important oilseeds of West Bengal by a systematic study of available types in West Bengal and outside.

The recurring expenditure on the scheme is estimated at Rs. 1,72,610/- for five years. Out of this, the Committee will meet the entire expenditure for the first two years while in the subsequent three years it will be shared on 50 : 50 basis with the State Government. The Committee's share of the total amount involved is estimated at Rs. 1,15,227/-.

(5) *Scheme for research on groundnuts in Saurashtra.*

The main object of the scheme is to evolve races of the crop with high yield, high oil content, high shelling out-turn, low free fatty acid content, shorter duration and resistance to drought and pests and diseases. Important agronomic problems connected with the crop, namely, economic seed rate, optimum and economic dose of manures, efficient crop rotation and remunerative mixed cropping, will also be investigated.

The recurring expenditure estimated at Rs. 99,500/- spread over five years is to be shared by the State Government and the Committee on a 50:50 basis.

(6) *Scheme for agronomical studies on oilseeds at the Indian Agricultural Research Institute, New Delhi.*

The following items of work are contemplatad under this scheme. : —

(i) Large scale testing of varieties under different soil conditions.

(ii) Mixed cropping studies of oilseeds with cereals and or legume crops ; and

(iii) Standardisation of manurial and cultural schedules for new strains and their influence on soil as affecting the succeeding crops.

The scheme is estimated to cost Rs. 23,230/- for a period of 5 years to be met in full by the Committee.

(7) *Scheme for the establishment of groundnut experimental station for the Pollachi Tract in the Madras State.*

The object of the scheme is to evolve groundnut strains suited to the

tract and to investigate problems of local importance.

The net cost of the scheme estimated at Rs. 48,396/- is to be shared on 50:50 basis by the Committee and the State.

II. Pests and Diseases :

(8) *Scheme for research on pests and diseases of castor and other oilseeds in Hyderabad.*

Entomological :—Trials will be carried out with vegetable oils both in the laboratory and in the field on a large scale for the control of castor pests. D. D. T. and Benzene Hexachloride, will also be tested. A thorough study of the castor capsule borer and groundnut aphis will be made and suitable control measures worked out.

Mycological :—A general survey of the diseases of the crop in Hyderabad State carried out during the years 1939 to 1944 showed that groundnut suffers heavily from leaf spot diseases and linseed from rust and wilt. It is now proposed to carry out a detailed survey of the diseases of the oilseed crops, especially groundnut and linseed, as was done for the castor crop previously under a scheme jointly financed by the Indian Council of Agricultural Research and the Hyderabad Government. It is also proposed to test the findings of such work on these crops carried out in other States under a scheme subsidised by the Council and subsequently taken over by the Committee.

The scheme is estimated to cost Rs. 86,770/- spread over five years, of which the committee's share amounts to Rs. 33,847/-.

(9) Linseed Rust scheme, Agra.

(a) Interim extension of the investigations at Agra/Simla.

(b) Five year scheme for investigations an linseed rust in Uttar Pradesh.

(i) The first scheme has been in progress since April 1946 at Agra under the control of the Late Dr. K. C. Mehta of the Agriculture College, Agra. Under it, preliminary studies on the rusts of linseed have been carried out and rust collections from different parts of the country have been analysed with a view to determine the physiologic races. It provided also for testing varieties of linseed for their resistance to rust.

The administrative control of the scheme has now been transferred to the Divssion of Mycology, Indian Agricultural Research Insti-

tute, New Delhi. It is being continued on the present lines pendin[g] arrangements for more comprehensive work on these subjects under [a] fresh scheme to be started by the Committee in U. P.; which is described in (b) below.

(ii) The second scheme is for more comprehensive work on the rusts of linseed. Under it the following items of work are proposed :—

(a) Field observations on the incidence of rust at suitable places in important linseed growing tracts of India and collection of samples for the determination of physiologic races.

(b) Estimation of loss in oil content under different intensities of rust attack.

(c) Maintenance of rust cultures from collections obtained from different places in a viable condition in the green house at Chaubattia. The different physiologic races met with in the collection will be established and maintained in pure state.

(d) Study of the viability of uredo and teleuto stages under field and laboratory conditions and determination of the method of carry over of the disease from season to season.

(e) Rust resistance tests on different varieties of linseed and flax with physiologic races collected from various parts of the country.

(f) Study of the effect of the seed dressing and various other treatments, such as thorough cleaning of seeds (to remove fragments of teleutosori) exposure of seed to sun in May and June, etc., on the control of rust.

(g) Analysis of about 75 rust collections of every year to determine the physiologic races every year. This work will be done according to the technique followed by Flor in U. S. A.

[(h)] Selfing of some widely prevalent races and study of the progeny with a view to ascertain whether these races are homozygous or heterozygous ?

[Th]e total cost of the scheme for a period of 5 years is estimated [...],010/- to be borne entirely by the Committee.

Seed multiplication and distribution.

Scheme for multiplication and distribution of improved groundnut seeds in Saurashtra State.

[Und]er this scheme it is proposed to multiply at a nucleus seed

farm the improved strains viz., AH. 25, AH. 32 and AH. 334 from Madras. On a modest estimate, 20,000 lbs. of seeds of the improved strains will be produced at the farm. With this quantity, the Seed Development Staff will organise 200 acres of primary seed farms in selected centres every year. The produce of the 200 acres of primary seed farms will be purchased and a further 1000 acres of Secondary seed farms will be run from the third year. The produce of secondary seed farms will be arranged to be procured by District Officers and made available for supply to the cultivators at the various Departmental Depots. Thus, from the fourth year, seeds of the strains will be released for cultivation over 5000 acres. When regular supply of pure seeds of the strains from the nucleus seed farm is ensured and their subsequent stages of multiplication properly organised and carried out, it will be possible to replace the local varieties with the improved strains over nearly 3 lakhs of acres.

The net recurring expenditure of the scheme is estimated at Rs. 65.500/- spread over five years and will be shared on a 50:50 basis by the Committee and the State Government.

11. Scheme for the multiplication and distribution of strains of mustard in West Bengal.

The object of the scheme is to multiply the improved strains of mustard such as *tori* 7 and *rai* 5 and distribute these strains through the departmental stores and through local co-operative societies. The net recurring expenditure estimated at Rs. 11,800/- spread over five years is to be shared on a 75:25 basis by the Committee and the State Government.

(12) Scheme for the multiplication and distribution of groundnut. Etablishment of a groundnut seed farm in Punjab.

Under the scheme, it is proposed to take 100 acres of land on rent in one or two blocks, from refugee land lords near Machiwara town at a rental value of Rs. 40/- per acre annually. The tract is sandy in nature and is stated to be very suitable for groundnut cultivation. The seed farm is proposed to be leased out to tenants on *Batai* system for raising pure seed of groundnut varieties. At the time of harvest, the share of the tenants which will be 2/3rd of the produce is also proposed to be purchased.

IV. Fundamental and applied research.

(13) Scheme for developing a method of determining the unsaturation

of small quantity of oil at the Indian Agricultural Research Institute, New Delhi.

Under the scheme it is contemplated to develop a quick method for determining the unsaturation of small quantity oil from a few seeds of a variety.

The scheme is estimated to cost Rs. 13,500/- spread over three years to be met in full by the Committee.

(14) Scheme for research on phyllody disease of sesamum, at Indian Agricultural Research Institute, New Delhi.

Under the scheme the following items of work are contemplated :—

(*i*) To confirm if the disease is of virus nature.

(*ii*) To determine the mode of transmission of the disease.

(*iii*) Study of the properties and host range of the disease.

(*iv*) *Testing* of the varieties evolved at the Institute for their resistance to phyllody.

The scheme is estimated to cost Rs. 11,250/- spread over three years to be met in full by the Committee.

(15) A scheme for cytogenetical studies on some oilseed crops of India for five years at the Indian Agricultural Research Institute, New Delhi.

Under the scheme it is contemplated to take up work on mustard, sesamum and linseed.

The scheme is estimated to cost Rs. 54,480/- spread over five years to be entirely borne by the Committee.

(16) Scheme for evolving breeding technique for castor, Hyderabad.

The object of the scheme is to evolve a breeding technique for self sterile castor.

The scheme is estimated at a cost of Rs. 7,000/- spread over five years to be met in full by the Committee.

(17) Scheme for fundamental research on oilseeds in Uttar Pradesh in evolving breeding technique in brassica crops.

The object of the scheme is to study the breeding technique of mustard including hybrid vigour, isolation and testing and utilisation of inbreds and strain building and its evolution.

The recurring cost of the scheme is estimated at Rs. 69,79,9

spread over five years and will be shared on a 50:50 basis by the Committee and the State Government.

V. Improvement of machinery.

(18) Improved machinery for cultivating and harvesting of groundnut.

In 1950, the Committee had considered the question of developing in India machinery for sowing, cultivating and harvesting, etc. of groundnut on the lines of similar machinery used in foreign countries. It was, however, agreed that the machinery used in America would not be suitable or economical under Indian conditions and the Committee, therefore, decided that the work of evolving suitable machinery should first be undertaken at the Indian Agricultural Research Institute on their own. At the same time it was desired that a proper scheme for evolving suitable bullock driven machinery should be drawn up by the Head of the Division of Agricultural Engineering of the Institute after a visit to the important groundnut growing tracts in the country to study the machinery already in use. Accordingly, Shri R. Venkataramiah, Head of the Division of Agricultural Engineering, visited Nagpur, Coimbatore, Bapatla and Tindivanam and submitted a report containing his proposals for future work. The report was considered by the Committee and it was decided that in addition to bullock driven machinery the proposals should include work on devising machinery operated with tractors and that a study should also be undertaken of the existing power driven groundnut decorticators with a view to study the optimum number of revolutions under which these should be worked so as to reduce the percentage of nooks and broken kernels to the minimum. Two schemes were accordingly submitted by the Head of the Agricultural Engineering Division at the Indian Agricultural Research Institute, one for evolving improved bullock driven machinery and the other for evolving power driven machinery for cultivating and harvesting of groundnut. These were considered by the Committee and it was recommended that both the schemes should be taken up separately and simultaneously and that the work should be carried out at Coimbatore and Tindivanam, respectively, where facilities were reported to be available.

The schemes were estimated to cost Rs. 1,36,076/- and Rs. 93,189/- for a period of five and three years, respectively. They will be conducted under the administrative control of the Government of Madras who have agreed to provide the necessary facilities.

D. Import of improved varieties of oilseeds for trail.

(i) Sunflower seeds.

As decided by the Committee at its meeting held in October 1949, the representatives of the Government of India in U. S., Argentina, Canada, Australia, Russia and Brazil were requested to arrange for the supply of about 10 lbs. each of the improved varieties of sunflower grown in these countries for trial in India. About 10 lbs. each of the improved varieties *viz.*, Mennonite, (2) Sunrise, and (3) Advanced first generation, were received from Canada, along with full particulars regarding the season of sowing harvesting, seed rate etc These have been distributed to the various State Governments and the Indian Agricultural Research Institute, New Delhi, for trial under Indian conditions. A detailed report on the performance of these varieties has been called for.

Two samples of seeds were also received from Hungary and one sample from Italy. Seeds from other countries are awaited.

(ii) Improved varieties of linseed from U. S. A.

As reported in the earlier reports, three varieties of improved linseed *viz.*, Dakota, B. 5728 and Shyenne, were obtained from America. These were tried at the farms of various agricultural institutes in the country. The general performance of these varieties was not found to be satisfactory in the matter of yield. It was, therefore, recommended that the experiments need not be repeated in the States but may be carried out for one more year with a view to see if they were disease resistant and hardy varieties which may be useful for breeding work.

(iii) Other oilseeds imported for trial.

A few samples of improved seeds of peanut and castor were obtained from Brazil. The samples of peanut were sent for trial a Bombay and Madras and those of castor at Hyderabad. Samples o castor and rape-seed were also imported from Italy for trial.

E. Collection and utilisation of non-edible oilseeds.

(i) Minor Oilseeds.

As has been reported earlier, the question of developing the production and utilisation of non-edible oilseeds has been taken up by th Committee with the State Governments.

To assess the potentialities of this vast but untapped source c

supply of vegetable oil, the Committee has decided that a survey of the minor oilseeds grown in the States should be carried out. Such a survey which was conducted in Madras with the financial aid of the Committee has yielded very useful and interesting results. On the basis of the results of that survey the Committee has invited all other States to carry out similar surveys in their respective areas with the financial aid from its funds. A scheme for a survey in the U. P. has since been sanctioned in 1950-51 while proposals are awaited from the other States.

A good deal of technological and development work has been indicated in the report of the Madras survey and the question of taking up these investigations is also receiving attention.

(ii) Tung Cultivation:

According to the decision of the Committee on the recommendations contained in Shri C. M. John's report on research on oilseeds crops in India, a Special Officer was appointed in November 1950 to survey the possibilities of growing Tung trees on a commercial scale with a view to increase the production of Tung oil which is used in the manufacture of paints, varnishes etc. The Special Officer has already visited all areas in the country where tung cultivation has been considered possible and has collected a good deal of valuable data regarding existing plantations and potentialities for the future. His report is likely to be completed in the course of next few months and will be considered by the Committee.

F. Important reeommendations and action taken.

Spread of improved varieties : A statement containing the information regarding improved strains of oilseeds already evolved in different States, was compiled and supplied to all the State Governments with the request that the strains may be tried systematically in their areas for a few years to determine their yield and suitability for the various tracts, etc. and to supply to the Committee summaries of the results of the trial. The State Departments of Agriculture have been requested to make available seeds of these strains that are available with them and might be required fort trial in other States.

Setting up of separate commodity research station : The question whether each commodity Committee should have a central research station of its own for fundamental research or whether with a view to save expenditure on buildings, supervisory staff and apparatus, etc., such work could be undertaken at the existing research stations of the State Governments, Central Institutes and other Commodity Com-

mittees, was considered. The Committee agreed with the recommendations made at a conference of Directors of Agriculture, Secretaries and Directors of Research of the Commodity Committees, held in March 1950, that as an experimental measure, fundamental research on oilseeds should be carried out at the existing research stations of the State Governments, Central Institutes and Commodity Committees with such financial assistance as may be necessary from this Committee. If after allotting the work between these Institutes there were still other problems left over, the question of having a separate Central Research Station for oilseeds for undertaking such items of work will be considered. Accordingly, a list of the problems which were to be tackled in the first instance as indicated in the Report on Research on Oilseed Crops by the Special Officer appointed by the Committee, was sent to all the State Governments, Institutes and Commodity Committees with the request that such of the problems as could be undertaken by them might be indicated. The allotment of work would be based not only on the suitability of the place and availability of adequate equipment but also on the competence of the persons entrusted with the work. In all 14 schemes were received from different States and Institutes. These schemes, some of which have already been mentioned in this Chapter, were examined by the Committee and the problems of fundamental work allotted to those institutions where necessary facilities were available and which could take up such work. For such work, the Committee has agreed to provide the minimum additional staff required and some grant for contingent expenditure.

Plant exploration and allocation : The following decisions have been taken by the Committee in this regard :

(a) Plant exploration and introduction should be a central responsibility and should be undertaken at the Indian Agricultural Research Institute under the Indian Council of Agricultural Research scheme on the subject. Introduction and distribution of new varieties will be under the control of a Committee, consisting of the Director, Indian Agricultural Research Institute, the Director, Botanical Survey of India, representative of the Forest Research Institute and the Plant Protection Adviser to the Government of India. The guiding principle in this connection will be to prevent duplication and the introduction of pests and diseases or potential weeds. This will, however, not apply in the case of plant breeding material, the introduction of which will be handled

by plant breeders of the Central Institutes and State Governments. The handling of breeding material by various Botanists will of course be subject to the provisions of the Destructive Insects and Pests Act of 1914 as at present.

(*b*) Collection and maintenance of live plant specimens of cultivated and wild varieties and allied species of all oilseed crops should be the responsibility of every research station as a normal part of its work.

Fall in acre ·yield of Groundnut :—With regard to the reported decrease in the yield of groundnut, it was decided that information should be collected first from the States as to whether there had been any actual decrease in the yield of groundnuts, and if so, to what extent and in what areas. It was also suggested that crop cutting experiments be conducted to furnish elaborate information in this regard.

The State Governments were requested accordingly. The replies indicated generally that the low yield noticeable in specific areas was attributable mainly to adverse seasonal conditions.

It was decided that an Agricultural-cum-Information Officer with considerable experience in oilseeds research should be appointed to study the progress of work in the various schemes sanctioned by the Committee and to give wide publicity to the results of reseach achieved. The proposal has been sanctioned and steps are being taken to appoint an Officer.

CHAPTER IV

DEVELOPMENT OF VILLAGE OIL CRUSHING INDUSTRY

The question of developing the village oil crushing industry has engaged the attention of the Committee since its inception. This industry provides a part-time remunerative occupation for the cultivators and also ensures supply ot fresh oil and cake in the villages.

The position of the village oil industry with special reference to its various possibilities *vis-a-vis* the power mills and the directions in which it requires improvement including financial assistance etc., has been surveyed by a special Committee which made a number of recommendations for the improvement of the industry. These recommendations were accepted and several of them have already been given effect to.

The following are the important measures taken in this regard·—

(a) Organisation of Co-operative Societies of oil crushers.

The co-operative organisation of the village oil crushers is considered most important for the purpose of improving the village oil crushing industry generally and particularly in such matters as the introduction of improved ghanis, the profitable purchase of oilseeds & sale of oils and oilcakes, storage, etc. Altogether eight schemes have been sanctioned in the various States up to the period under Report, for the purpose of organising these societies. The progress of work done under these schemes in certain States till March 1951, is indicated below :—

(i) *Bihar* :

The scheme was originally sanctioned at a total cost of Rs. 7,920/- to the Committee for a period of one year in 1949 by the Committee at its meeting held in October 1948. Work under the scheme started on 1st September 1949 at the following centres :—(1) Bihar Sharif (Patna); Muzaffarpur; Lohar Danga (Ranchi); (4) Maharajgunj (Saran) (5) Sultangunj (Bahadargarh). Till 28th February 1951, 50 societies were organised with a membership of 647. These members were running 384 *desi* ghanis with a crushing capacity of 3 seers per charge. About 50 Wardha ghanis were manufactured with a crushing capacity of 6 seers to 10 seers per charge. During the period 1st April 1950 to 28th February 1951, approximately 2526 mds. of mustard seeds were crushed and the total quantity of oil produced was 842 mds. valued at Rs. 101,040/-. Against the total grant of Rs. 25,000/- sanctioned for advance of loans to oilmen for purchase of Wardha Ghanis Rs. 6,450/- were advanced during the year. The scheme has since been extended for one year, from 1st September 1950 at a cost of Rs. 12,709/- to the Committee.

(ii) *Madras* :

The scheme was originally sanctioned at a cost of Rs. 3,543/- for a period of six months and was started from first April 1949.

The report of the work done under the scheme during the period 1st April 1949 to 30th September 1949 and the recommendations made therein were considered by the Committee at its meeting held in March 1951. The Registrar of Co-operative Societies, Madras, submitted a proposal for the appointment of a special staff for continuing the work further in this direction. The Committee felt that the proposal was very useful for the develop-

ment of the indigenous oil crushing industry in the State and, therefore, desired that the State Government be moved to undertake the scheme, sharing its cost on a 50:50 basis with the Commitee. The State Government were requested accordingly and their decision in the matter is awaited.

(*iii*) *Orissa* :

The scheme was originally sanctioned for a year at a total cost of Rs. 7,200/- to the Committee and was started in 1950. An extension for one year was approved by the Committee at its meeting held in March 1951 at a total cost of Rs. 8,803/- to the Committee.

Though the scheme was undertaken from 3rd January 1950, work actually commenced from 3rd June 1950 after the Inspectors appointed under the scheme joined their duties. Upto June 1950, five societies were organised and three new societies were registered with a total of 369 ghanis in different ghani co-operatives with a working capital of Rs. 1,30,962/- These societies produced 698 mds. of different kinds of oil worth Rs. 91,780/- and earned a net profit of Rs. 5,323/-.

(*iv*) *Punjab* :

The scheme which was originally sanctioned at a cost of Rs. 7,420/- from May 1949 was approved for a further extension of one year at the meeting of the Committee held in March 1951 at a total cost of Rs. 8,425/- to the Committee.

The total number of societies started since the commencement of the scheme upto December 1950, was 90 out of which 60 were registered. The working capital of the 60 societies registered was Rs. 85,588/-. Up to this period about 165 ghanis were set up and financial assistance rendered to the members during the 6 months July-December 1951 alone amounted to Rs. 23,945/-.

(*v*) *Vindhya Pradesh :*

The scheme which was sanctioned at a cost of Rs. 7,200/- to the Committee for one year was recommended for postponement by the Committee at its meeting held in April 1950.

(b) Scheme to popularise Wardha ghanis by opening demonstration centres in the different States.

As reported earlier, the object of the scheme is to popularise in different States the Wardha ghani which is an improvement over the old indigenous ghani by opening demonstration centres and giving loans and subsidy to the oil men for putting up improved ghanis etc.

Schemes in this regard are already running in the States of Bihar, Orissa and U. P. The progress of work done under the scheme in these States is indicated below :—

(i) *Bihar :*

Reference has been made to this activity in Bihar under Section (i) of the previous section (a) of this Chapter.

(ii) *Orissa :*

The scheme was sanctioned at a cost of Rs. 7,200/- to the Committee for one year. Work under the scheme was taken up with effect from 27th September 1950 with the starting of six demonstration units consisting of three Wardha ghanis each.

(iii) *U. P.*

Work under the scheme is in progress since 1948-49 and the Committees share of the expenditure on it during 1948-49, 1949-50 and 1950-51 which was Rs. 11,595/, Rs. 28,148/- and Rs. 25,258/-, respectively, was approved by the Committee at its meeting held in March 1951.

During the three year 1948-49, 1949-50 and 1950-51, the scheme had been running in 44 districts and about 1156 ghanis were set up. Besides the number of ghanis set up approximately 200 more improved ghanis were introduced by other organisations in the State. Many of the stone crushers which were lying idle in the State were converted into Wardha type of ghanis .The total number of stone crushers converted into Wardha ghanis during the years 1948-49, 1949-50, 1950-51 was 278. About 307 carpenters were also trained during this period.

(c) *Loans to co-operative societies of oilmen.*

The Committee suggested earlier to the State Governments that interest free loans may be given to the co-operative societies for purchase and supply of seeds to oilmen. The Committee would share with the State Governments the interest on loans up to 2 lakhs of rupees for each State depending upon the importance of the State for the ghani industry and the progress of co-operative societies of oilmen etc. The interest on loans over and above this amount would be met entirely by the State Governments.

Proposals were received in this connection from Orissa, Punjab, Bihar and Saurashtra. The Governments of Orissa and Saurashtra proposed to sanction Rs. one lakh each as advance of interest free

loans, while the Governments of Punjab and Bihar proposed Rs. two lakhs and Rs. 50,000/- respectively. The Committee at its meeting held in March 1951, sanctioned these proposals to the extent asked for, or up to a maximum of Rs. 5,000/- as its contribution towards loss of interest from its funds, whichever was less. A proposal was also received form the Mysore Government that this Committiee should advance the entire loan also from the Committee's funds in addition to its share of loss of interest thereon. The Committee, however, agreed only to grant its share towards the loss of interest upto 50 percent. The State Government were informed accordingly.

(d). Village Oil Industry Research and Training Institute.

As reported earlier, the Committee had sanctioned a scheme for the starting of a Village Oil Industry Research and Training Institute at Nagpur, at a cost of Rs. 1,21,114/- spread over three years including a non-recurring expenditure of Rs. 55,564/-. The Institute was intended for training organisers in the efficient crushing of oil in ghanis and in the manufacture of soap, hair oil, etc., as a cottage industry and also for training carpenters in the manufacture and repair of the Wardha Ghani.

While arrangements for starting the Institute were in progress, Dr. J. C. Kumarappa, President, All India Village Industries Association, Wardha, sent a proposal to the Hon'ble Minister for Food & Agriculture, Government of India, that the training contemplated could be undertaken by his Association. The scheme was, therefore, modified in consultation with the Association. Both the Committee and the Government of India approved of the revised arrangements proposed. The arrangements were as follows :—

Two categories of staff are to be trained-organisers and carpenters. As their designation denotes, the organisers are intended to help in establishing the industry on sound lines by rendering advice and practical help in all aspects of the industry. Apart from a thorough study of co-operative organisation, their training will include practical instruction in the design, construction and working of improved ghanis; the organisation of side industries like soaps, hair-oils, purgatives, lubricants, boiled oil, paints etc.; theoretical instructions in matters relating to the production of oilseeds, their classification and grading and the various processes prior to crushing such as identification, screening, decortication, storage, etc.; statistical intelligence relating to prices and trade; studies of the finished products including qualities in oils and oilcakes and their proper handling,

storage and utilisation in industry. This is more or less exhaustive and the whole training is expected to last 5 months. In the case of carpenters, a 2½ months' course is provided for, which includes practical training in the construction and maintenance and actual operation of ghanis (both wooden and cement) and decorticators and theoretical training in the general principles of wood technology in relation to ghani construction.

The scheme provides for training two batches of organisers and two batches of carpenters every year, each batch consisting of 30 persons. The cost of their training which includes their living expenses in Wardha on the basis of the standard of living and discipline enforced by the Association, and their tuition fees, is borne entirely by the Committee, in the shape of a grant to the Association. The candidates to be trained are to be nominated by the State Governments from among persons already employed in this profession or those whom the Governments concerned will be in a position to employ after training, in the organisation of the village oil industry. This is done with a view to ensure that the training received by the persons is not wasted. As a further inducement, persons selected for the training are also granted travelling allowance to Wardha and back by the Committee.

The State Governments were requested to nominate their candidates for the training which is expected to start soon.

(e) Award of a prize for best model of village ghani.

The Committee at its first meeting felt that the present village ghanis were not very efficient in that their turn-over was low and the percentage of oil left in the cake was high and suggested that the design and the efficiency of these ghanis should be improved. With this object in view the Committee announced the award of a prize of Rs. 5,000/- to any person or body who designs the best model of village ghani, satisfying certain conditions, *viz.*, the capacity of the ghani per charge should be over 10 seers; the time taken to crush one charge should be not more than one hour in the case of *til* seed; it must be run by a single bullock; the price should not exceed Rs. 200/-; the cake should not contain more than 10 per cent of oil. The last date for receipt of entries was 31st March 1950. The Committee appointed a Special Sub-Committee at its meeting held in April 1950 to scrutinise and select the best model of village ghani for the award of prize. The Special Sub-Committee met at Wardha on the 28th December 1950 and held trials of the ghanis selected by it. The report of the S... Committee on the result of trials was ...

al Sub-

ttee at

its meeting held in March 1951. As the trial of all the ghanis selected by it could not be held simultaneously, the Committee agreed with the recommendations of the Special Sub-Committee that those ghanis be tried again before a final decision was taken in the matter.

(f) Other important recommendations made and action taken.

The recommendations of the Committee and the decisions taken at its meetings held in April 1950 and March 1951, on some of the important matters relating to oil crushing and action taken on these, are briefly enumerated below :—

(1) In connection with the organisation of co-operative societies of oilmen, certain State Governments experienced difficulties in organising the same as the requisite number of oilmen was not available in a single village or union or even within the area covered by four or five unions. The Committee, therefore, recommended in this connection that :

(a) wherever necessary, consumers should also be included as members in these societies in addition to oilmen, as their presence in these co-operative societies will protect the consumers' interest in putting into the market pure ghani oil ; and .

(b) consumers should be requested to invest money in these societies.

The Government of India agreed with the recommendations of the Committee which was communicated to all the State Governments for information.

(2) The Committee accepted the report of the Village Oil Industry Survey Sub-Committee including the principle of levying a cess on the oils crushed by power mills recommended therein. It was unanimously decided that the cess might be fixed at the rate of one anna per maund for the first five years and thereafter at the rate of two annas per maund on all oils crushed in oil mills.

The recommendations of the Committee have been forwarded to the Government of India for their consideration.

(3) It was decided that two of the Japanese hand presses which were being worked at the Cottage Industries Centre at Arab-ki-Sarai, New Delhi, should be purchased for installing at the Committee's Institute for Village Oil Industries Research & Training at Nagpur, for comparative study with the improved ghani.

Necessary enquiries are being made from the Ministry of Rehabilitation regarding the supply of these hand presses.

CHAPTER V

DEVELOPMENT OF MARKETING

New schemes sanctioned.

(1) Scheme for revising the report on the marketing of linseed in India.

The necessity of compiling up-to-date information with regard to supply, demand etc., of oilseeds and their products cannot be over-emphasised. In view of the valuable information contained in the several reports on the Marketing of oilseeds and their products published by the Agricultural Marketing Adviser to the Government of India, the Committee desired that action should be taken to bring these reports up-to-date. With this object in view, it sanctioned, as a first step, a scheme for revising the report on the Marketing of Linseed in India at a cost of Rs. 17,000/-.

The Government of India have agreed to the proposal and further action is expected to be taken shortly.

(2) *Scheme for issue of free grants to eight co-operative societies in the Madras State to construct decorticating factories or godowns for stocking groundnuts ; and*

(3) *Scheme for subsidising co-operative societies or unions for the construction of godowns and for the purchase of machinery for processing and decortication in the Bombay State.*

The Committee had decided earlier that interest-free-loans may be advanced to the societies and unions from the groundnut fund which will benefit groundnut cultivators, on the usual conditions enforced by the State Governments for advancing such loans, the loss of interest being borne by the State Government and the Indian Central Oilseeds Committee on a 50:50 basis.

The above recommendations were agreed to by the Government of India and the State Governments of Madras and Bombay were requested to send schemes on the above lines.

The Madras Government's scheme in this respect to grant a loan of Rs. 96,000/- to four Market Committees was approved by the Committee at its meeting held in March 1951. The Government of India's approval has also since been obtained and the scheme has been sanctioned.

The Committee also sanctioned a scheme received from the Bombay Government for granting a loan of Rs. one lakh to be advanced out of the groundnut fund for the issue of interest free-loans to the Co-operative Societies for the construction of godowns at the rate of Rs. 10,000/- to each. The Government of India's sanction to the scheme was obtained and communicated to the State Governments.

(4) Grade specifications of vegetable oils.

With a view to draw up grade specifications of different vegetable oils produced in the country and also to draw up all India Standard specifications for these oils, the Committee had sanctioned a scheme under the Agricultural Marketing Adviser to the Government of India. Work under the scheme started on 28th September 1949 and was extended upto January 1951. Under the scheme, a large number of representative samples of different qualities of oils both edible and non-edible produced in power mills, ghanis, etc., put on the markets in the different parts of the country, were collected and analysed. The report of the work done under the scheme is under preparation on receipt of which further action in the matter will be taken by the Committee.

The Committee incurred a total expenditure of Rs. 99,000/- on the scheme.

Important recommendations made and action taken.

The recommendations of the Committee and the decisions taken at its meetings during the period under the report on some of the matters relating to development of marketing and action taken on these are briefly stated below :—

(1) Compulsory grading of vegetable oils.

The consideration of the question of grading of oils under AGMARK Standard on a compulsory basis was recommended for postponement for the present.

(2) Standard Contract Terms for oilseeds and oils.

It was reported in the previous Annual Report that with a view to improving the quality of oilseeds marketed, the Trade Associations in India had been requested to trade on the basis of all-India Standard Contracts drawn up by the Agricultural Marketing Adviser in consultation with the Trade.

Standard Contract Terms for vegetable oil transactions were drawn up and circulated to the interests concerned for comments and views. Modified standard contract terms for groundnut oil and

castor oil together with explanatory notes were circulated to the Trade Associations, Chambers of Commerce and the Registrars of Co-operative Societies with the request to persuade the members to adopt these terms in trading in oils. Similar terms for linseed oil are under preparation which will be circulated to the Trade when ready.

(3) *Establishment of regulated markets for oils.*

The need for establishing regulated markets for oilseeds with a view to improving the quality of oilseeds and eliminating mal-practices like adulteration was considered and it was recommended to the State Governments that those Governments which had not so far enacted any law for setting up regulated markets may pass necessary legislation in this regard and that other States, having already legislation in this regard, may consider extending the scope of their acts to the oilseeds trade also. The matter is being pursued with the State Governments.

(4) *Edible oils (Grading & Marking) Rules, 1950.*

Amendments proposed to the Edible Oils (Grading and Marking) Rules 1939, published in the Ministry of Agriculture Notification No. F. 10-205/49 C. O. dated the 14th December 1949, were approved.

(5) *Adulteration of vegetable oils.*

The problem of adulteration of vegetable oils with mineral oil and of mustard oil with argemone oil has been reviewed from time to time by this Commitee and various recommendations made to the Government with a view to prevent mal-practices. The various steps taken by this Committee were reported in the Committee's previous annual Report. The question was further considered by the Committee during the period under the report. It was pointed out that the large quantities of transformer oil, switch oil and insulating oil, all of which were essential for the electrical industry, were suspected to be disposed of by unscrupulous employees of the electrical undertakings to vegetable oil dealers for adulteration purposes. It was further suspected that the electrical undertakings disposed of used transformer oils openly to any and every customer and that this rejected oil with high acid value was used to a large extent for adulterating edible oils. It was, therefore, arranged through the Central Electricity Commission to circularise the electrical undertakings in the country to ensure that used transformer oils must not be disposed of without the oil being first denatured by the addition of kerosene oil or other denaturants. The position was also brought to the notice of the State Governments with a request to keep a strict watch on the disposal of

transformer oil, switch oil. insulating oil, etc.

In response to the above recommendation, the Government of India requested the State Governments to keep a close watch over the sale and use of these oils in their jurisdiction and to strictly enforce the Pure Food Laws to minimise the adulteration of edible oils. In order to check that the imports of these oils are accounted for by each importer, monthly returns of the imports made of these oils are obtained from Customs authorities and also from every importer showing the disposal of these oils. The information contained in these returns is passed on by the Government of India to the State Governments concerned every month to enable them to watch the disposal of the oil as far as possible. For indigenously produced mineral oil etc., it has been arranged with the Oil Companies in the country that they should submit monthly returns of purchases direct to the State Governments, for enabling them to keep a close watch over the disposal of these oils.

As the Soap and Vanaspati industries in the country consumed a large quantity of edible oil, the Committee felt that the co-operation of these industries should be availed of in checking the adulteration of edible oils as far as possible. Accordingly the All India Associations of the two industries were requested to arrange with their members to report to the Associations concerned cases of the adulteration detected by them.

(6) *Representation on the Export Advisory Council.*

It should be urged strongly to the Government that the Committee should be given representation on the Export Advisory Council and that the representative of the Committee should be briefed by the Committee from time to time so that the point of view of the Committee might be made available to the Export Advisory Council at every State. The Government have been requested accordingly.

(7) *Procurement of oilcakes.*

A uniform policy in regard to procurement etc., of oilcakes should be evolved ; in any case the prices offered for the cake by the States should be more or less equalised and as far as possible the cost of production of oilcakes at the mills should be taken into account by the State Governments while fixing their procurement prices.

The above recommendations of the Committee have been

communicated to the Government of India whose decision in the matter is awaited.

It was agreed that the Committee was against any kind of price control on any oilseed and oil.

(8) *Export of oilcakes.*

The Committee reiterated its previous recommendation that as there was acute shortage of oilcake which is used both as cattle feed and for manuring purposes in this country, the export of oilcakes should not be permitted at present.

It was decided to prepare a list of oilcakes and their quantities which this country did not require and could be exported so that the ban on the export of cakes could be removed to that extent. The information is being collected from the different State Governments etc.

(9) *Export of oilseeds.*

As recommended earlier by the Committee, Government should, as far as possible, encourage the export of oils in preference to oilseeds. If, however, the Government found it necessary to lift the ban on the export of groundnut, sufficient publicity should be given to this decision so that all competitors might have equal opportunity to compete in the export. In granting the permits for the export of groundnut seeds, proper scrutiny should be made to ensure that contracts entered into before the removal of the ban are not honoured for the issue of export permits.

The Government of India were moved accordingly. The Government intimated that the ban had been, in fact, retained longer than was originally intended. Adequate publicty through trade notices and press note was given to the traders to register their sales. Instructions were also issued to the effect that sales already entered into prior to the lifting of ban were not to be honoured.

(10) (a) *Free inter-state movement of oilseeds and vegetable oils etc.*

The difficulties experienced by the trade in moving oilseeds and their products from one place in the country to another and also in the export trade are reviewed by the Committee from time to time. The Committee's recommendation has always been that there should be free movement of oilseeds, oils and oilcakes between and within the different States of the Indian Union and that the export duty levied on these articles by some of the States should be abolished as far as possible. As a result of this the Government of India with-

drew in 1950 the powers to restrict the movement of oils and oilcakes which were conferred on the State Governments under the Essential Supply (Temporary Powers) Act, 1946. Only the Saurashtra Government till then had banned the movement of groundnuts and the matter was under the active consideration of the Government of India. As regards oilcakes, the Committee appreciated the position of the State Governments with regard to their requirements of oilcake for the Grow More Campaign and recommended that a certain proportion of the production of mills may be reserved by the State Government to meet their requirements, the balance being disposed of and moved by the millers without any restriction. The Central Government had no declared policy that free movement of oilcake should be allowed throughout the country and the Committee's recommendation was under their consideration.

(*b*) *Inter State movements.*

In view of the difficulties experienced in exporting vegetable oils and oilseeds from Saurashtra and certain other States due to the different policies adopted by these State Governments, the Committee reiterated its previous recommendation that inter-State bans and restrictions on the movement of oilseeds and oils including movement between Saurashtra and other parts of the Indian Union should be removed.

(c) The Government of India should be requested to move the Saurashtra Government to remove the ban on the export of groundnut and groundnut oil to other parts of the Indian Union and not to encourage State trading as it would not be possible for the State to undertake such trading successfully. The export to foreign countries from Saurashtra should be in the form of oil and not in seed.

In response to these recommendations, the Government of India have intimated that Saurashtra had been permitted to undertake the selling of groundnut and oil for export on their own account in consideration of certain factors peculiar to the State. The question of removing the ban on the movement of oils and oilseeds from Saurashtra to other parts of Indian Union was stated to be under the consideration of the Government of India.

(11) (a) *Tank wagons for vegetable oils.*

The Committee had considered the supply position of tank wagons on railways and requested the Government to provide more tank wagons for transporting vegetable oil. It also recommended that tank

wagons should not be subject to priority restrictions. All possible endeavours were made by the Railway Board to procure additional tank wagons and by April 1950 about 650 broad gauge tank wagons were put into service. Necessary instructions were also issued to the effect that petrol in tank wagons and bulk traffic moving in tank wagons should be excluded from priority restrictions unless it was absolutely necessary to include these when imposing restrictions on general traffic.

Even though more wagons were stated to have been put on the railways, difficulty was reported to be still experienced on the certain rail ways for tank wagons for moving vegetable oils from the interior to terminal markets. The Railwry Board were, therefore, requested to make an equitable distribution of the existing tank wagons on the different railways both on the broad gauge and meter gauge railways. Further, with a view to determine the requirements of tank wagons by the vegetable oil industry, various Trade Associations, etc., concerned in the country were addressed in the matter. The question will be pursued with the Ministry of Railways, (Railway Board,) after the information has been collected.

(b) Providing tanker facilities in steamer for bulk export of oils.

The question of providing the above facilities was pursued with the Indian Shipping Companies. It was suggested that several compartments should be provided in every tanker to facilitate small shipments and also different kinds of oils. The matter is being pursued further.

(c) Providing facilities at the ports for storing oil meant for export.

The question of providing necessary facilities at the Ports for the shipment of bulk oil on the lines of the arrangement made at the Madras port is also being pursued with the port authorities and the trade interests concerned at Bombay and Calcutta.

(d) Storage facilities at Railway stations for bulk movement of oil.

In consultation with the trade in the country, information regarding the land space required at different railways by the parties concerned for erecting storage tanks at their own cost was forwarded to the Ministry of Railways, (Railway Board), for allotment of suitable plots to the parties. The Ministry of Railways, (Railway Board), have passed on the information to the Divisional Superintendents of different railways for necessary action.

(e) Allocation of wagons for moving empty containers for oils.

The Committee recommended to the Government as early as

March 1948, that adequate transport facilities and priority for transporting empty containers for oils from various consuming centres to the producing mills should be provided by the Railway Board. The Committee reviewed the position in this respect at its meeting held in March 1951 and recommended that just as there was high priorty for the movement of oils for shipment abroad there should be similar priority for the movement of empty containers also for packing vegetable oils. The recommendation of the Committee has been communicated to the Government of India and their decision in the matter is awaited.

(12) Forward Contracts (Regulation) Bill, 1950.

The Committee while agreeing generally with the reported views of the Expert Committee appointed by the Government of India on the Forward Contracts (Regulation) Bill 1950, suggested certain modifications. These were:

(*i*) The Expert Committee appointed by the Government of India recommended that in granting recognition to an Association the Government may nominate one member on their own behalf and not more than three on behalf of interests not directly represented on any Association. The Oilseeds Committee endorsed this and recommended that of the three members not less than one should be nominated from the Growers. In the revised bill the Government of India accepted the recommendation of the Expert Committee and presumably the Committee's recommendation will be considered by Government at the time of making nominations.

(*ii*) The Expert Committee desired that every recognised Association should provide in its bye-laws *inter alia* that every member of the association should be required to submit to the association daily reports of the business done by it. The Oilseeds Committee recommended that such daily reports should be required to be submitted for a specific period that may be decided upon by the governing body of the association, if and when found necessary.

The Committee's recommendation was accepted by the Government of India by making provision in the revised bill that the Byelaws of the Association should provide for the obligation of members to supply such information or explanation and to produce such books relating to their business as the governing body may require.

(iii) The Oilseeds Committee agreed with the recommendation of the Expert Committee that a special body to be called the "Forward Markets Commission" be established for administering the Act. It, however, observed that the possibility of carrying on this work with non-official members instead of whole-time Government Officers should be examined.

In the revised bill, the provision made in this regard is to the effect that the Commission shall consist of not more than three members appointed by the Central Government of whom the Chairman shall be a full-time member and the others full-time or part-time as the Central Government may direct and one of the members of the Commission shall be an officer of the Central Government and another a person having wide experience in the organisation and working of forward markets in India.

(13) (a) Award of prize for groundnut decorticator.

The entries received in connection with the award of a prize of Rs. 2,000/- for the best model of groundnut hand decorticator received upto 10th April 1950, should be placed before the Special Sub-Committee constituted for selecting the best model.

The Special Sub-Committee which was constituted at the meeting held in April 1950 met at Delhi on 20th December 1950, and scrutinised all the entries received in this connection and selected models for trial. It was decided that the trial should be conducted at Wardha.

(b) Award of a prize for Mohwa seed decorticator.

A prize of Rs. 2,000/- should be offered for the devising of a suitable hand driven machine for decorticating Mohwa seeds in the villages.

Action is being taken to draw up a specification of the decorticator after which necessary announcements will be issued widely.

CHAPTER VI

TECHNOLOGICAL RESEARCH.

A Completed scheme

(1) Design and manufacture of a small hand filter press.

This scheme for the designing and manufacture of a small hand filter press suitable for use in the villages with country ghanis,

was sanctioned at a total cost of Rs. 1,500/-, was started at the Harcourt Butler Technological Institute, Kanpur, in February 1950. It terminated in June 1950.

The filter press manufactured under the scheme is a plate—and—frame type without washing arrangement and can be worked by hand for hours. It can filter 2-3 mds. of average mustard oil in an hour. Its approximate cost is about Rs. 250/-.

The filter press has been sent to the All India Village Industries Association for finding out its suitability under village conditions.

B Schemes sanctioned.

The schemes relating to Technological Research so far sanctioned by the Committee, their object and progress of work made under each of them are briefly enumerated below : -

(1) *Scheme for the trial of Windrum and other fibre making machines for the manufacture of linseed fibre from linseed straw.*

Windrum machine:—As reported in the last annual report, a Windrum machine which was reported to be very useful for extraction of fibre from linseed straw, was imported by the Committee from U. K. and was installed at the Harcourt Butler Technological Institute, Kanpur, for trial. It has been found that the fibre extracted by this machine can be easily mixed with jute the manufacture of sacking material. It has also been observed that the machine is not suitable for the extraction of fibre either from unretted straw or from fully retted straw. To solve this problem a special retting technique has been evolved at Harcourt Butler Technological Institute and is being adopted at the two centres in U. P. where large scale trials with the machine are being carried out.

Dr. Richharia's Hand machine :—Two hand driven fibre making machines invented by Dr. Richharia, Economic Botanist to the Government of Bihar, were also purchased and tried at Harcourt Butler Technological Institute, Kanpur. The fibre obtained from the machine was crude and required further cleaning. The process was very slow and may be suitable to cottage workers only. The resultant fibre may find use in rope making but not for weaving and spinning purposes.

Dr. Richharia's Power machine :—The Committee has decided to purchase a power driven machine designed by Dr. Richharia, with a view to make a comparative study of its working with the Windrum fibre making machine at Kanpur.

Japanese fibre making machine :—The Japanese fibre making machine which is being worked at the Work-cum-Production Centre, Ministry of Rehabilitation, Arab-Ki-Sarai, New Delhi, for production of various fibres, was examined with a view to find out its utility in extracting linseed fibre from linseed straw. Experiments in this regard are in progress.

In addition to these trials, literature from Italy regarding a process for separating the fibre from textile plants without retting and from Belgium regarding deseeding, scutching and other machines, was obtained and passed on to the Principal, Harcourt Butler Technological Institute, Kanpur, for study in connection with the trials in progress there.

A leaflet on the "Extraction and utilisation of linseed fibre", in the light of the results of trials so far conducted was prepared by Dr. Dhingra, Principal, Horcourt Butler Technological Institute, Kanpur, at the instance of the Committee. The leaflet has been sent to various linseed producing States for translation into regional languages and distribution to cultivators and others interested.

The Committee also arranged to supply duel purpose linseed strains from the Indian Agricultural Research Institute to various linseed producing States for trial and multiplication.

(2) *Scheme for undertaking manufacture of a small solvent extraction plant in India.*

This scheme, at a total cost of Rs. 12,000/- to the Committee, was sanctioned in the year 1949. The work was undertaken at the Harcourt Butler Technological Institute, Kanpur, under the supervision of the Oil Expert to the U. P. Government. The progress of work during the period under report had been very slow due to difficulties in procuring certain controlled materials required in the fabrication of the plant.

Four units of the plant *viz.*, the extractor, cake drier, evaporator and condenser have been fabricated and the plant is expected to be erected soon for trial.

(3) *Scheme for the investigation of nutritive value of different oil-cakes produced by the ghani and expeller process.*

The scheme was sanctioned in November 1949 for a period of three years at the Indian Veterinary Research Institute, Izatnagar.

The main object of the scheme is to find out the nutritive value of various types of oilcakes produced by ghani and expeller process and also the percentage of oil essential in the cake for cattle nutrition. Solvent extracted cakes also are proposed to be tried under the investigations. Besides, the relative feeding value of cottonseed and cottonseed cake will also be studied.

Work under the scheme started in January 1950 and the progress made till August 1950 is as follows:—

Fat requirement of adult bullocks:—Nine adult Kumaoni bullocks were divided into three groups. They were fed on a ration consisting of wheat bhoosa, green grass and a concentrate mixture. The concentrate mixtures for all the three groups were composed of the same components and had the same Starch Equivalent and Digestible protein value. The percentage of fat in the concentrate mixtures was, however, different in all the three groups. After feeding the experimental diet for a sufficent period to eliminate the effect of previous feeds, etc., a metabolism experiment was performed to determine the effect of different levels of fat ingestion on the assimilation of various nutrients. The results are being assessed.

Arrangements to study the fat requirement of growing animals are being made.

Comparative nutritive value of cotton seed and cottonseed cake:- 12 milch animals of almost similar age, lactation and milk yield were divided into three groups. Group I was fed on a standard dairy ration 50 per cent of the Digestible Protein of which was replaced by cottonseed in group II and by cottonseed cake in Group III. The quality and the quantity of milk yield is being observed and the observations will continue over the full lactation period. A metabolism experiment on these animals was performed to study the nutritive value of cottonseed and cottonseed cake as compared to the standard dairy ration and also as compared to one another.

Experiments to study the comparative nutritive value of mustard cake by ghani and expeller processes are in progress.

C General.

Important recommendations made and action taken.

(1) *Research on oil technology:* The Committee considered the final report of the Oil Technologist appointed by it to study the technological research work done on oilseeds and their products in the various research institutes in India and to suggest the future programme of work in this regard.

The various recommendations as summarised in the report were noted by the Committee and it was agreed that instead of setting up a central technological institute under this Committee, the problems involved should be distributed to the various institutes according to the availability of facilities and expert staff.

The Committee also appointed a small *ad hoc* Committee to examine the list of problems along with any other problem which has been noticed and to make recommendations regarding the allocation of subjects between the various institutions and also the method of financing the projects.

The recommendations of the *ad hoc* Committee will be placed before the next meeting of the Committee.

(2) *Representation on the Council of Scientific and Industrial Research from the Committee.*

It was decided that this Committee should be represented on the Vegetable Oils Committee of the Council of Scientific and Industrial Research for co-ordination of the work relating to technological research on vegetable oils and their products. The Council accepted this recommendation and Shri K. P. Bhargava, a member of the Committee and also an Oil Technologist, was nominated as its representative on the Vegetable Oils Committee of the Council.

(3) *Pool of Technological Experts:*—It was decided that a pool of experts (Oil Technologists) should be maintained consisting of specialists nominated by various universities and of the Heads of Research Institutions and that the Technological Sub-Committee should, as occasions arose, co opt experts from this pool in connection with specific problems relating to oil technology.

(4) *Admixture of argemone with mustard:*—It was decided that the results of experiments on the tolerance limit of argemone oil in mustard oil, which was being conducted at the Indian Veterinary Research Institute, Izatnagar and the Harcourt Butler Technological Institu-

te, Kanpur, should be ascertained.

It was also decided that further information should be obtained with regard to the investigations on the detoxication of mustard oil containing argemone oil and separation of argemone seeds from mustard seeds which were being carried out by two Patna Scientists. Information regarding the investigation, if any, made on the feeding quality of detoxicated mustard oil, should also be obtained.

The Committee was anxious that the above mentioned investigations should be completed at an early date and suggested that if any financial help was required from the Committee in this regard, it should be rendered by it.

The matter is under correspondence with the authorities concerned.

(5) *Machinery for processing neem seed* :—It was decided to place a sum of Rs. 14,500/. at the disposal of the Harcourt Butler Technological Institute, Kanpur, for expenditure in connection with the devising of suitable machinery for pulping, drying and decorticating neem seeds. The U. P. Government under whose supervision the work will be conducted have agreed to provide the staff and working expenses. The Government of India's sanction is now to be obtained to the Committee's share of expenditure.

(6) *Mohwa Cake* :—The difficulty which the cultivators were at present experiencing in utilising mohwa cake as manure arose from the presence of saponin in the cake. It was pointed out that as a result of research work done on the subject during the past 20 years it had been found that composting and washing it with water resulted in the removal of saponin and the cake could then be taken up by the soil, satisfactorily.

The Committee, therefore, decided that a pamphlet should be prepared in popular language setting forth the work done already on the subject and the method to be followed in utilising the cake and that it should be widely circulated throughout the country in the various regional languages. It was also recommended that all the State Governments should be requested to use mohwa cake as manure.

It was further desired that the National Chemical Laboratory, Poona, and the Harcourt Butler Technological Institute, Kanpur, should be requested to carry out further work, if necessary, on the elimination of saponin from the cake by some easy process which could be taken up by the cultivators.

Action is being taken on the above recommendations.

(7) Utilisation of cheaper non-edible oils :—The Forest Research Institute, Dehra Dun, had published leaflets on the non-edible oil-bearing plants. The Committee desired that these should be obtained with a view to exploit the information contained therein. The various leaflets published by the Forest Research Institute, Dehra Dun, were accordingly obtained. The information contained in these leaflets has been extr cted and furnished to the State Governments who were requested to examine the possibilities of utilising larger quantities of non-edible oils and also to indicate the quantity of different non-edible oilseeds produced and the quantity of oil that could be obtained therefrom. The information received from the State Governments was consolidated and placed before the Committee at its meeting held in March 1951.

It was also decided that research work should be undertaken at the National Chemical Laboratory, Poona, on the utilisation of cheaper non-edible oils for lubricating and other purposes in place of mineral oil.

Training of technical staff for oil mills

The question of training of Technical staff for oil mills was taken up with the Director General of Resettlement and Employment. The Regional Directors of the Directorate contacted the individual mills in their areas and their views in the matter were collected by them. The details of the training indicating the time and period of training, the number of trainees, etc., are being worked out by the Directorate.

Manufacture of paper pulp from castor stems

The experiments are in progress at the Forest Research Institute, Dehra Dun. The experiments carried out so far revealed that the yield of unbleached and bleached pulp was satisfactory. Its strength, properties and colour were also found to be upto the mark. However, the bleach consumption was high and was attributed to the bad conditions of storage of the castor stems tried. Further experiments in order to investigate the causes of high bleach consumption and also the possibilities of its use for manufacturing writing paper, are proposed to be undertaken with a supply of fresh castor stalks from Hyderabad.

CHAPTER VII

STATISTICS OF OILS AND OILSEEDS

(i) Acreage and yield statistics.

With a view to improving the statistics of acreage and production of oilseeds, the Committee sanctioned earlier a pilot scheme for conducting crop cutting experiments on oilseed crops. The total expenditure on the scheme is estimated at Rs. 35,675/- spread over one year, 2/3rd of which is to be borne by this Committee.

Under this scheme, crop cutting experiments on linseed will be carried out in one district of Madhya Pradesh, on rape and mustard in one district of U. P., on til and castor each in one district of Madras and on groundnut on a state-wide scale in Madras.

In Madhya Pradesh, the statistical analysis of the data from the crop cutting experiments on linseed by the random sampling method, will be carried out in the Land Records Dept. in conjunction with the analysis of the results of the co-ordinated scheme for crop-cutting experiments on food crops. The technical details of the survey on linseed in Madhya Pradesh will, however, be settled by the State Government with the Statistical Adviser, Indian Council of Agricultural Research.

The experiments in U. P. and Madras will be conducted by the Statistical Adviser, Indian Council of Agricultural Research. Work under the scheme, which could not be started during the period under report, is expected to be taken up during 1951-52.

Statistics of acreage and production of oilseeds and of oilseeds crushed and oil produced in various mills, are given in APPENDIX IV.

(ii) Cost of production :—

The question of invetigating into the cost of production of oilseed crops has been engaging the attention of the Committee for some time. The Committee sanctioned a pilot scheme in this regard at an expenditure of Rs. 57,392/- to be equally shared by this Committee, Indian Central Cotton Committee and the Indian Council of Agricultural Research. The scheme is awaiting final acceptance by the Indian Central Cotton Committee and the Indian Council of Agricultural Research of their respective shares of the expenditure involved.

PUBLICATION OF LITERATURE

The Committee, at its meeting held in March 1951, considered the question of encouraging the publication of literature relating to vegetable oilseeds and their products and felt that in view of the comparative scarcity of useful literature on the subject it should encourage the publication of articles, journals and books by rendering financial help subject to certain conditions. For dealing with such applications the Committee also appointed a small Technical Committee for examining the manuscripts. The recommendations have been brought to the notice of the State Governments, Universities and Research Institutions. A number of applications have been received and will be considered at the next meeting of the Committee.

GENERAL.

(i) Increased contributions from the Committee.

The Committee observed that in many cases the schemes were not implemented by the States because it was found that the expenditure to be borne by the State Governments imposed a very heavy strain on their finances. It was, therefore, recommended that the whole question of contribution by the Committee towards such schemes should be taken up with the Government of India with a view to imparting a larger measure of assistance to the State Governments. An *ad hoc* Committee was appointed and authorised by the Committee to negotiate with the States and the Government of India regarding the basis on which the expenditure should be shared by the Committee in the different schemes which had not been implemented by the State Governments due to their inability to bear their share under existing conditions.

The *ad hoc* Committee dicussed the matter with the Hon'ble Minister for Finance and recommended high contributions from the Committee in certain cases. The Government of India have generally agreed to these *recommendations and increased contributions* have accordingly been sanctioned in a number of cases.

(ii) Planning of production of oilseeds and vegetable oils and their products.

The following resolution proposed by Shri Dip Narain Sinha has been adopted :—

Realising the importance of the development of the cultivation of oilseeds and of the oil producing industries on proper lines, a well planned scheme for the purpose is now considered very essential.

This meeting (March 1951) of the Indian Central Oilseeds Committee, therefore, resolves to prepare suitable overall scheme taking into account the following factors :—

1. The quantities of oil required for consumption in the country.
2. The quantities of oilcakes for manures, cattle feed and other purposes.
3. Quantities of oilseeds, oils and oilcakes now produced in the country on an area-wise basis.
4. Total quantities of oilseeds required to be produced for meeting the full requirement of the country.
5. Quantities of oilseeds and oils required for foreign markets.
6. Area under oilseeds cultivation at present.

The plan should include all oilseeds, vegetable oils and their products and should contain suggestion for developing the cultivation of oilseeds suitable for different areas in the country; suggestions for developing research, technological and marketing work including development of village oil crushing industry ; and periodical targets for achievement in each direction.

ACKNOWLEDGEMENTS

The Secretary is grateful to the President, Sardar Datar Singh and to Professor N. G. Ranga, Vice-President of the Committee for the kind assistance and guidance received from them. He also wishes to thank the other members of the Committee, Officers of the Ministry of Agriculture, the Trade Associations in the different States and the Oil Millers Associations and others, who have helped him in various ways in his official work. Thanks are also due to the staff of the Committee for their efficiency, loyalty and devotion to duty.

T. S. Krishnamurti

Secretary

APPENDIX I

List of members of the Indian Central Oilseeds Committee nominated under Section 4 of the Indian Oilseeds Committee Act, 1946, as on 31st, March, 1951.

Sl. No.	Name of Members.	Clause of Section 4 of I.O.C. Act, 1946 under which nominated.	Interest represented.	Nominating Authority
1.	2	3	4	5
1.	Vice-Chairman, Indian Council of Agricultural Research, (President).	(a)	..	Ex-Officio.
2.	Agricultural Commissioner with the Government of India.	(b)	...	do
3.	Agricultural Marketing Adviser to the Government of India.	(c)	..	do
4.	Shri L. K. Jha, I. C. S., Chief Controller of Exports, Ministry of Commerce, New Delhi.	(d)	Ministry of Commerce.	Central Govt.
5.	Dr. J. N. Ray, Ph. D., D. Sc., FIC., FNI., Deputy Director General of Industries & Supplies, Directorate General of Industries & Supplies, New Delhi.	(d)	Ministry of Industry & Supply.	do
6.	Shri K. R. Damle, I. C. S., Joint Secretary, Ministry of Food, New Delhi.	(d)	Ministry of Food	do
7.	Director of Agriculture, Madras.	(e)	Government of Madras.	Madras Govt.
8.	The Deputy Director of Agriculture (Crop Research), Bombay State, Poona.	(e)	Government of Bombay	Bombay Govt.
9.	Director of Agriculture, Animal Husbandry & Fisheries, West Bengal, Calcutta.	(e)	Government of W[illegible]	West Bengal Govt.

1	2	3	4	5
10.	Dr. T. R. Mehta, Economic Botanist (Oilseeds) to the Government of U. P., Kanpur.	(e)	Government of U. P.	U. P. Govt.
11.	Dr. S. M. Sikka, Economic Botanist for Cereals, Cotton & Oilseeds to the Government of Punjab, Jullundur City.	(e)	Government of the Punjab	Punjab Govt.
12.	Director of Agriculture, Bihar, Patna.	(e)	Government of Bihar.	Bihar Govt.
13.	Director of Agriculture, Madhya Pradesh, Nagpur.	(e)	Government of Madhay Pradesh.	Madhaya Pradesh Govt.
14.	The Deputy Secretary, Commerce Department, Saurashtra Government, Rajkot.	(f)	Acceding States.	Central Govt.
15.	Shri Maddi Sudarsanam, M. L.C., Guntur, (Madras).	(g)	Grower nominee of Madras Govt.	Madras Govt,
16.	Shri Pidathala Ranga Reddy, M. P., Member All India Congress Committee, Giddalur, Kurnool Distt., (Madras).	(g)	do	do
17.	Shri V. K. Palaniswamy Gounder, President, District Board Coimbatore, Agriculturist, Vettai-Karanpudur P. O., Via Pollachi, Coimbatore Distt.. (South India)	(g)	do	do
18.	Shri R. Venkatasubba Reddiar, B. A., B. L., Advocate, Landlord, Tindivanam, South Arcot, (Madras).	(g)	do	do
19.	Dr. V. H. Patil, Ph. D., Patilwadi, Post Shahada, Distt. West Khandesh, (Bombay).	(g)	Grower nominee of Bombay Govt.	Bombay Govt.

1	2	3	4	5
20.	Shri Vyankatareo Pirajirao Pawar, B. A., LL. B., M. L. A. At & Post Karad, Distt. Satara, Bombay.	(g)	Grower Nominee of Bombay Govt.	Bombay Govt.
21.	Shri V. V. Patil, B. Ag., B.Sc., M. L. A., P. O. Hubli, Distt. Dharwar, (M. S. M. R.), Bombay.	(g)	do	do
22.	Ch. Mukhtar Singh, M. P., Secretary, Vigyankala Bhawan, Meerut City.	(g)	Grower nominee of U. P. Govt.	U. P. Govt.
23.	Shri Bashir Ali Khan, Hon. Magistrate & Zamindar, Mahoba, Hamirpur, (U. P.)	(g)	do	do
24.	Shri Bishan Man Singh, Civil Lines, Fatehpur, (U. P)	(g)	do	do
25.	Shri Iswar Lal Ghose, M. A., B.L., Malda (West Bengal).	(g)	Grower nominee of West Bengal Govt.	West Bengal Govt.
26.	Shri Brojendra Nath Banerjee, President Congress Committee, Raiganj, West Denajpur, (West Bengal)	(g)	do	do
27.	Shri Girish Tewary, M. L. A., Hon. Grow More Food Commissioner, Bihar Secretariat, Patna.	(g)	Grower nominee of Bihar Govt.	Bihar Govt.
28.	Shri Deep Narayan Sinha, M.L.A Purantand, P O. Partaptand, Distt. Muzaffarpur, (Bihar).	(g)	do	do
9.	Shri N. J Deshmukh, Shirala, Distt. Amravati, (Madhya Pradesh).	(g)	Grower nominee of Madhya Pradesh Govt.	Madhya Pradesh Govt.

1	2	3	4	5
30.	Shri Manakchand Baldeoji Jain, Harda, Distt. Hoshangabad, (Madhya Pradesh).	(g)	Growers Nominee of Madhya Pradesh Govt.	Madhya Pradesh Govt.
31.	S. Waryam Singh, M. L. A., Bhagowal Distt. Gurdaspur.	(g)	Grower nominee of Punjab Govt.	Punjab Govt.
32.	S. Gian Singh Rarewala, Prime Minister, Patiala & East Punjab States Union, Patiala.	(g)	Grower nominee of Central Govt.	Central Govt.
33.	Shri A. Bheemappa Naik, B. A., Advocate, Chitaldrug Mysore.	(g)	do	do
34.	Shri V. S. Khode, M. L. A., Agriculture, Ex - Vice - Premier, Madhya Bharat, Khargone.	(g)	do	do
35.	Shri N. G. Rudrappa, Member Representative Assembly, Nidige Shimoga Taluk, Mysore.	(g)	do	do
36.	Capt. Dalip Man Singh, M. A., LL.B., Vice-President, Indian Co-operative Union, Ram Niwas Fatehpur, (U P.)	(h)	Co-operative movement.	do
37.	Shri K. P. Bhargava, B.Sc , Dip. Tech., Manager, M/s. J. K. Oil Mills, Kanpur.	(i)	Oilseed Technologist.	Oil Technologists' Association Kanpur
38.	Shri R. V. Gurjar, Pandharpur, Distt. Sholapur, (Bombay).	(j)	Village Oil seed Crushing Industry	Central Govt.
39.	S. Gurbachan Singh, Village Allawal Pur, Distt. Jullundur.	(j)	do	do
40.	Shri Vichitra Narain Sharma, M. L. C., Meerut.	(j)	do	do
41.	Shri C. S. Pettit, c/o. The Vanaspati Manufacturers' Association of India, Arya Bhawan, Graham Road, Ballard Estate, Bombay-1.	(k)	Vanaspati Industry.	do

1	2	3	4	5
42.	Shri H. L. Goopta, B. A., F. R. E. S. (Lond). F. F. C. S. (Eng.) 3, Raj Kumar Chatterjee Road, P. O. Cossipore, Calcutta-2.	(l)	Power Oil-seed Crushing Industry	Central Govt.
43.	Shri Odhavji Devchand Sejpal, President, Saurashtra Oil Mills Association, Rajkot.	(l)	do	do
44.	Shri Rattilal M. Gandhi, c/o. R. Rati Lal & Co., Post Box No. 5012, Bombay-9.	(m)	Exporters of Oilseeds & Oilseed Products.	do
45.	Sıri V. V. Ramaswamy, Merchant, Virudhunagar, (S. India).	(m)	do	do
46.	Shri R. L. Nopany of M/s. Daulat Ram Rawatmull, 178, Harrison Road, Calcutta.	(n)	Federation of Indian Chambers of Commerce & Industry	Federation of Indian Chambers o Commerce & Industry
47.	Shri M. Paspatti, c/o. Rallis India Ltd., Post Box No. 166, 21 Ravelin Street, Fort, Bombay.	(o)	Associated Chambers of Commerce.	Associated Chambers of Commerce.
48.	Prof. N. G. Ranga, M. P., Village Nidubrolu Post, Guntur District, Madras.	(q)	Federation of Rural Peoples' Organisation	Federation of Rural Peoples' Organisation
49.	Shri Guntur Narasimha Rao, M. L. A., No. 3, Balfour Road, Kilpauk, Madras.	(r)	Oilseed Trade Associations.	Central Govt.
50.	Seth Devji Rattansey, c/o. The Grain & Oilseeds Merchants' Association, Musjid Bunder Rd. Bombay-3.	(r)	Oilseed Trade Associations.	Central Govt.
51.	Shri Ramdas Kilachand, c/o. The Bombay Oilseeds Exchange Ltd. Musjid Bunder Rd. Bombay-3.	(r)	do	do

1	2	3	4	5
52.	Shri N. C. Rami Reddy, Vice-President, Madras Oil & Seeds Association, Kalikiri P. O., Chittoor Distt. (Madras).	(r)	Oilseed Trade Association	Central Govt.
53.	Shri V. J, Gupta, M. P., Visakhapatnam, Madras.	(s)	Consumers of Oilseeds Products.	Parliament of India.
54.	Shri V. C. Ahmed Unni, M. P., P. O. U. C. College, Alwaye, Travancore-Cochin, (S. India).	(s)	do	do
55.	Shri S. Sivan Pillay, M. P., B.A B.L., Theroor, Suchindrum P. O. (Via) Nagercoil, Travancore.	(s)	do	do
56.	Shri M. L. Chattopadhyay, M.P 18/4 Dover Lane. Calcutta, 29.	(s)	do	do
57.	Shri Nemi Saran Jain, M. P., Seelkunj, Bijnor, (U. P.).	(s)	do	do
58.	Shri Mathura Prasad Misra, M P. c/o. The Rastravani, Buddha Marg, Patna-1.	(s)	do	do
59.	Shri D. D. Italia, Din Lodge, Station Road, Hyderabad Deccan.	(t)	Interests not otherwise represented (Hyderabad Growers)	Central Govt.
60.	Shri N. T. Mone, I. C. S. Joint Secretary & Vegetable Products Controller, Ministry of Agriculture, New Delhi.	(t)	Interests not otherwise represented.	do

APPENDIX II

Name of members of the Sub-Committees of the Indian Central Oilseeds Committee as on 31st March, 1951.

I. FINANCE SUB-COMMITTEE.

1. Vice-President (Chairman).
2. President (Ex-officio).
3. Shri A. B. Naik.
4. Shri R. Venkatasubba Reddiar.
5. Shri Dip Narayan Sinha.
6. Shri Ramdas Kilachand.
7. Shri Manakchand Baldeoji Jain.
8. Shri Devji Rattansey.
9. Capt. Dalip Man Singh.
10. Shri V. J. Gupta.
11. Shri Maddi Sudarsanam.
12. Vichitra Narain Sharma.

II. AGRICULTURAL RESEARCH & DEVELOPMENT SUB-COMMITTEE.

1. President.
2. Agricultural Commissioner with the Government of India.
3. Agricultural Marketing Adviser to the Government of India.
4. Shri K. R. Damle.
5. Dr. S. M. Sikha, Economic Botanist for Cereals, Cotton & Oilseeds, Punjab.
6. The Director of Agriculture, Madras.
7. The Director of Agriculture, Animal Husbandry & Fisheries, West Bengal.
8. The Deputy Director of Agriculture (Crop Research) Government of Bombay.
9. Economic Botanist to the Government of Uttar Pradesh.
10. The Director of Agriculture, Bihar.
11. The Director of Agriculture, Madhya Pradesh.
12. The Deputy Secretary, Commerce Department, Saurashtra.
13. Shri V. P. Pawar.
14. Dr. V. H. Patil.
15. Shri R. Venkatasubba Reddiar.
16. Shri Pidathala Ranga Reddy.
17. Shri V. K. Palaniswamy Gounder.
18. Shri Bishan Man Singh.

19. Shri Iswar Lal Ghose.
20. Shri Girish Tewary.
21. Shri Dip Narayan Sinha.
22. Shri N. J. Deshmukh.
23. Shri Gian Singh Rarewala.
24. Shri Mathura Prasad Misra.
25. Shri D. D. Italia.
26. Shri R. Venkataramiah - (Co-opted).

III. EXPERT SUB-COMMITTEE.

1. President.
2. Agricultural Commissioner with the Government of India.
3. Agricultural Marketing Adviser to the Government of India.
4. Shri K. P. Bhargava.
5. Dr. V. H. Patil.

IV. TECHNOLOGICAL SUB-COMMITTEE.

1. President.
2. Vice-President.
3. Agricultural Commissioner with the Government of India.
4. Dr. J. N. Ray.
5. Shri K. R. Damle.
6. Shri K. P. Bhargava.
7. Shri Bashir Ali Khan.
8. Shri V. P. Pawar.
9. Shri C. S. Pettit.
10. Shri N. C. Rami Reddy.
11. Shri Ratilal M. Gandhi.
12. Shri H. L. Goopta.
13. Shri N. G. Rudrappa.
14. S. Waryam Singh.
15. Ch. Mukhtar Singh.
16. Prof. J, W, Mc Bain, (co-opted).

V MARKETING SUB-COMMITTEE.

1. President.
2. Agricultural Marketing Adviser to the Government of India.
3. Shri L K Jha
4. Shri K R Damle.
5. Shri V. V Patil
6. Shri Ratilal M Gandhi.
7 Shri S. Sivan Pillay.
8. Mr. M. Paspatti.

9 Shri Ramdas Kilachand
10. Shri Devji Rattansey.
11. Shri N. C. Rami Reddy.
12 Shri H. L Goopta.
13 Shri Odhavji Devchand Sejpal.
14 Shri C. S Pettit.
15. Shri Nemi Saran Jain.
16, Shri Maddi Sudarsanam.
17. Shri R. L. Nopany.
18 Shri V, K. Palaniswamy Gounder
19 Shri Brojendra Nath Banerjee.
20 Shri V. V. Ramaswamy.

VI. VILLAGE OIL INDUSYRY & CRUSHING SUB-COMMITTEE

1. President.
2 Vice-President.
3 S. Gurbachan Singh.
4 Shri Vichitra Narain Sharma.
5 Mr M Paspatti.
6 Ch Mukhtar Singh.
7 Shri V V Patil.
8 Shri Guntur Narasimha Rao
9. Shri V S Khode.
10 Shri Pidathala Ranga Reddy.
11 Shri M L Chattopadhyay.
12 Shri R V Gurjar.

VII LOCAL SUB-COMMITTEE

1 President
2 Agricultural Commissioner with the Government of India.
3. Agricultural Marketing Adviser to the Government of India.
4 Prof N G. Ranga
5 Shri Odhavji Devchand Sejpal
6 Shri Ramdas Kilachand.
7 Shri N T Mone
8 Shri Nemi Saran Jain.
9. Shri Mathura Prashad Misra.
10 Shri V C Ahammod Unni

|| Final estimates data having not yet been ..
State Govts. estimated figures have been utilised

£ Includes area in the States of Ajmer, Vindhya Prades[illegible]
Himachal Pradesh.

= Includes area in the States of Vindhya Pradesh and K[illegible]

APPENDIX IV

STATISTICS OF OILSEEDS AND OILS.

1. Oilseeds: Area and Production during 1950-51.

(i) *AREA*.

('000 Acres)

States.	Ground-nut.	Rape & Mustard	Linseed	Sesamum	Castor.
1. Bihar. (excluding merged territories) ...	...	319‖	313‖	43	17
2. Bombay ...	2,074	44	62	274	11
3 Madhya Pradesh ¶ ...	543	146	963	384	22
4. Madras ..	3,961	..	...	733	217
5. Orissa ...	63	65‖	17‖	252	46
6. Punjab ...	78	345	23	73	...
7. Uttar Pradesh / ...	224	3,503	851	1,182	9
8. West Bengal ...	...	221	66	17	...
9 Hyderabad ..	1,620	4	542	631	700
10. Madhya Bharat ...	304	95	323	314	10
11. Mysore ..	283	7	1	56	80
12. Rajasthan ..	68	170	131	642	...
13. Saurashtra ...	1,204	..	...	315	51
14. Ajmer ...	1£	..	...	27	...
15. Bhopal ...	2	2	59	34	...
16. Tripura ...	...	10	...	10	...
17. Vindhya Pradesh ...	..	26	149	242	1=
18. PEPSU ..	21	117	1	4	..
19. Kutch ...	3	(a)	...	11	..
20. Bilaspur ..	..	1	(a)	1	...
21. Himachal Pradesh ...	...	10	2	...	...
22 Travancore Cochin† ..	23	..	...	...	...
23. Assam	.	315	...	...	..
24. Delhi ..		5	.	.	...
TOTAL ...	10,472	5,505	3,503	5,245	1,255

¶ Includes estimates for pure and mixed crops.
† Relates to Cochin Area only.
/ Excludes Tehri Garhwal.
(a) Less than 500 Acres.
‖ Final estimates data having not yet been received from the State Govts. estimated figures have been utilised
£ Includes area in the States of Ajmer, Vindhya Pradesh and Himachal Pradesh.
= Includes area in the States of Vindhya Pradesh and Kutch.

APPENDIX IV—(*Contd.*)

(*ii*) PRODUCTION. ('000 Tons)

States		Ground-nut	Rape & Mustard	Linseed	Sesamum	Castor
1. Bihar (excluding merged territories	...	...	58‖	39‖	4	4
2. Bombay	...	687	9	5	30	14
3. Madhya Pradesh ¶	...	114	20	175	26	3
4. Madras	...	1,620	...	...	82	20
5. Orissa	...	21	11‖	2‖	23	4
6. Punjab	...	23	57	3	7	...
7. Uttar Pradesh /	...	103	504	141	81	2
8. West Bengal	...	...	41	11	3	...
9. Hyderabad	...	402	1x	38	36	51
10. Madhya Bharat	...	58	12	34	34	1
11. Mysore	...	46	1	(b)=	5	5
12. Rajasthan	...	14	36	12	48	...
13. Saurashtra	...	226	...	...	19	2
14. Ajmer	...	...	...	...	2	...
15. Bhopal	...	(b)£	...	7	3	...
16. Tripura	...	...	2	...	1	...
17. Vindhya Pradesh	...	...	2	18	16	(b)*
18. PEPSU	...	4	16	...	1 ⁰	...
19. Kutch	...	1	...	...	...	...
20. Bilaspur	...	...	...	...	...	...
21. Himachal Pradesh	...	...	1	...	...	...
22. Travancore Cochin i	...	12	—	...	...	...
23. Assam	...	55	55	...	...	...
24. Delhi	...	...	...	...	...	...
TOTAL	...	3,331	828	385	421	106

¶ Includes estimates for pure and mixed crops.

/ Includes Tehri Garhwal.

i Relates to Cochin Area only.

‖ Final estimates data having not yet been received from the State Govts. estimated figures have been utilised

(b) Less than 500 Tons.

£ Includes area in the States of Bhopal, Ajmer, Vindhya Pradesh and Himachal Pradesh.

= Includes area in the States of Mysore, PEPSU., Bilaspur and Himachal Pradesh

x Includes area in the States of Hyderabad, Bhopal, Kutch, Bilaspur and Delhi.

* Includes area in the States of Vindhya Pradesh and Kutch.

⁰ Includes area in the States of PEPSU, Kutch, Bilaspur and Himachal Pradesh.

APPENDIX IV—*Contd.*

2 Oilseeds Crushed and Oils Produced in Registered Mills during 1948.

(i) Oilseed Crushed

(Tons

States	Cotton Seed	Linseed	Rapeseed	Castor Seed	Sesame Seed	Coconut	Groundnut Shelled.	Groundnut Un-shelled	Mohwa	...as
West Bengal	678	32,689	88,917	1,749	175	...	2,265			
Bombay	1,555	10,294	26	41,977	7,359	6,815	2,33,097	60,690	3,147	285
Madras	...	..	..	3,599	2,942	7,656	1,32,979	90,727	9,807	2,031
Uttar Pradesh		34,424	1,19,817	12,799	2,568	216	1,656	47,797	..	386
Bihar		12,330	33,180	218	361	..	...	655	11,706	269
Punjab (I)	123	704	11,140	..	1,663	..	144	1,824	223	56
Madhya Pradesh		38,470	790	164	2,795	34	941	55,658	323	
Delhi	.		3,946	..	219	..	..		395	20
Orissa			812	73	.	..	350	968		
Assam		37	22,629	...	354	...	7		66	
Travancore Cochin (Cochin only)	.	.	...	...	113	16,470	--	..		
Vindhya Pradesh, Saurashtra (Porbander only), PEPSU (Patiala only) and Rajasthan (Jodhpur only).		92	543	..	373	304		4,630		13
Total	2,356	1,29,010	2,81,800	60,579	18,922	31,495	3,71,439	2,62,919	25,667	3,060

EXTERNAL CAPITAL COMMITTEE.

REPORT.

PART I.

Introductory.

Terms of Reference Members and Meetings.

Personnel and terms of reference to the Committee

1. The terms of reference to the Committee were "*to consider the question of the flow of capital into India from external sources*". The original Members were :—

(1) The Honourable Sir Basil Blackett, K C B, *Chairman.*

(2) The Honourable Sir Charles Innes, K C.S.I., C I E.

Elected by the Council of State :—

(3) The Honourable Mr. J. W A Bell

(4) The Honourable Dr Dwarkanath Mitter.

(5) The Honourable Mr G A. Natesan.

Elected by the Legislative Assembly :—

(6) Sir P S. Sivaswami Iyer, K C.S I, C I E, M.L.A.

(7) Pandit Madan Mohan Malaviya, M L.A

(8) Vithalbhai Javerbhai Patel, Esq, M L A.

(9) W. S J. Willson, Esq, M L A

2. Our first meeting was held at Simla on the 23rd September, 1924, and it was decided that the most practical method of eliciting the information necessary for our deliberations would be the preparation of a questionnaire and its issue to important public bodies and individuals who took an interest in the matter The general lines of the questionnaire were settled at that meeting and the details adjusted by correspondence.

Terms of questionnaire.

3. The questionnaire was as follows :—

Forms of Capital

1. What are the different forms in which external capital enters India ?

Encouragement.

2. In which of these cases is the entry either unobjectionable or necessary in the interests of India generally and of Indian industries n particular ?

3 Is it necessary to encourage the entry of any particular ariety ?

4 If so, what steps should be taken in this direction and to what ent is capital likely to be forthcoming as the result of such steps ?

Replacement.

5 How far is it possible to replace external by internal capital ?

L3ECC

6. What measures are necessary for—

(1) the greater attraction of indigenous capital for industrial purposes, and

(2) the development of banking organisation and credit facilities in India ?

Restrictions.

7. What are the forms of external capital the entry of which is objectionable ?

8. What are the objections in each such case ?

9. What restrictions can and should be imposed in each such case ?

10. What would be the effect of any such restriction on the—

(1) industries and development of the country generally,

(2) loan policy of Governments and local bodies, and

(3) holders of investments ?

Differentiation.

11. Is it necessary to differentiate in any respect and, if so, how would you differentiate between :—

(1) British and foreign capital, and

(2) Capital from foreign countries which exercise such discrimination and from those which do not ?

Practice elsewhere.

12. What is the practice in other countries (especially in the British Dominions) in the matter of encouraging or restricting the flow of foreign capital ?

4. The questionnaire was issued on the 18th November 1924 and replies have been received from the chambers, associations, and individuals mentioned in the Appendix. It did not seem necessary to take advantage of the offer of several of the parties who replied to the questionnaire to supplement their replies by oral evidence, as the material provided was adequate to enable us to arrive at conclusions which will fulfil the terms of reference. We would take this opportunity of thanking those who replied to our questions ; the more important suggestions will be mentioned and discussed in the report.

5. As the Committee was composed of members of the Legislature, it was only practicable to hold meetings during the sessions. Sufficient replies had not been received in time to enable us to hold a meeting during the cold weather session of 1925. Our meetings were therefore postponed until the August and September Session in 1925. In the meantime the Honourable Mr. J. W. A. Bell, Mr. W. S. J. Willson and Mr. V. J. Patel had resigned. The Council of State and the Legislative Assembly elected the following members in their places—

The Council of State—The Honourable Sir William Currie, Kt.

The Legislative Assembly—Messrs. C. B. Chartres and T. C. Goswami.

PART II.

Recommendations.

Amount of external capital in India.

6 We have not attempted to estimate the amount of external capital in India Any such calculation must be largely guess-work, though a certain amount of statistical material is available. Government returns show the amount of the outstanding loans of the central and provincial Governments and of municipalities, and the authorities of the various ports have given us details of their borrowings It would no doubt be safe to assume that the sterling portion of these and the London-enfaced rupee debt of the Government of India are held almost entirely by external investors, but it would be quite impossible to determine the proportion of the rupee loans not held by Indians The return of Joint Stock Companies in British India also gives figures showing the total capital of companies incorporated elsewhere than in India but working in India, but an examination of the various companies figuring in the list shows that in many cases, especially those of banks, insurance and navigation companies, it would be unfair to reckon more than a small percentage of the working capital as actually employed in India There is also the undoubted fact that Indians hold a large and increasing share both in external companies and in companies with rupee capital under non-Indian management. It is well known that a majority of the shares in Indian jute mill companies, which are almost entirely under such management, are held by Indians Besides, we do not think that any practical purpose would be served by an attempt to estimate the amount of external capital operating in India. Such calculations would only be of importance if it was decided to introduce a definite programme of replacement, as suggested in some of the replies For this purpose the nominal value would be useless, the actual market value would have to be ascertained and this fluctuates daily. In any case, we consider any definite programme of replacement completely impracticable.

7 If a general survey of the position were considered desirable with the object of ascertaining the real extent of the problem before us, it would also only be fair to take into consideration companies which had failed, as India retains not only the value of the assets left in the country, but the negative advantage that certain experiments have been proved to be failures. For instance, it is obvious that if an external company spends money without success in sinking oil wells or in prospecting for minerals, indigenous capital has been saved from the risk of fruitless expenditure This aspect of the question has been vividly put by Professor B Mukerjee —"British capital has helped India in several other ways not easily realised because they do not lie in the surface. We all welcome the increasing share of Indians in our industries. We are proud of those Indians who prosper in these lines We are happy when they succeed. But it must be admitted that part of the reason why they succeed so well lies in the fact that the field for them had been cleared long ago by British capitalists. The losses of pioneer industrialism in this country were borne by them. The greater part of the capital which they invested did not become fully remunerative until after long years of strenuous

waiting and work. The huge profits which these capitalists make—Sir George Paish puts it at £16 millions per annum—are seen; but the losses which they had to bear are not seen and are thus generally ignored. These initial losses are inevitable when a country is first sought to be developed. And these losses the British Capitalists had to bear. But once the country is developed—as it is now—once railways and steamers are built, markets are established, demand is stimulated and created, population has increased, labouring class is created and trained—all those who handle industries later on get the benefit of this development without being called upon to pay any price for it. Indian Capital which is now for the first time financing industries has avoided all these initial costs of development. It has also escaped a good deal of such initial industrial losses. It is easier for the Indians to succeed than would have been the case if the British pioneers had not lost. England has still a vast amount of her money invested abroad on which she still gets no interest at all."

Replacement of external by internal capital.

8. As a general principle, the inflow of external capital is not only unobjectionable in itself but is a valuable factor in assisting the economic development of a country and in increasing its wealth and employment. It is however even more advantageous that its requirements for new capital should be supplied from internal sources so far as internal capital is forthcoming. Ordinarily countries so far from attempting to discriminate against or to penalise the external capitalist do all they can to encourage the flow of capital. Striking evidence has been furnished to us in the replies of the efforts made by other parts of the British Empire to attract outside capital. Conditions in India are to a certain extent dissimilar, as India already possesses a large store of potential capital, but much of it is unproductively locked up in bullion and jewellery. As a general principle we should like to emphasise that the real solution of the problem lies in the encouragement of the Indian investor and the development of India's internal capital resources. There will be a certain amount of replacement of external by internal capital in any case by natural process, as external shareholders, in the words of Dr. Slater, " tend to get rid of their Indian investments in competitive industry when they leave the country, or at some subsequent date, sooner or later." It is recognised in practically all the replies that there is sufficient potential capital in India to meet the larger part of India's industrial requirements, but that it is timid, conservative and requires to be drawn out. That internal capital is available is shewn by the increase in Government rupee loans from 145 to 358 crores, and in the paid-up capital of joint stock companies from 80 to 251 crores, between 1913-14 and 1923-24, an increase of 387 crores. The fact, however, that the net imports of gold and silver since 1913 amount to 482 crores is evidence that large resources are still being hoarded which might be invested.

Development of credit and investment facilities.

9. Many suggestions have been received by us for the development of the internal capital of the country, but they are generally of a technical character and would require detailed expert examination before any opinion could be offered as to their practicability.

le progress has been effected by the creation of the Im-
k and the opening of new branches, and by the measures
Government to popularise its loans and cash certificates,
ık that more intensive action is desirable Co-ordination is
ıd a general survey should be undertaken to show what the
tually is and in what fields further progress can be effected.
consider ourselves competent to undertake this survey, and
ions made to us and the considerations which have occurred
g our discussions may not cover the entire field. We indi-
ore salient points, however, in order to illustrate both the
of the subject and the desirability of its investigation

e first essential is to increase the facilities for deposit
nent, and this entails both the creation of new branches
erial Bank and the extension of the activities of existing
the formation of new banks These latter are a matter for
terprise, and, as regards the former, though in view
nt rapid extension of the Imperial Bank the ground
ill have to be consolidated before a further advance be-
ible, a comprehensive inquiry might be instituted to ascer-
alities in which such extensions and the creation of clear-
would offer prospects of success The indigenous bank-
should also be examined to ascertain how far it may be
fit it into a modern system of banking It is universally
hat the indigenous system is in itself incapable of develop-
extent that would satisfy the banking requirements of the
At the same time, it fulfils valuable functions in affording
ities and it will be required to fulfil them for a long time to
ry endeavour should therefore be made to utilise it and to
the modern banking system which is being developed in

ere is a marked trend of opinion in many of the replies
nment should take a more active part in watching over
opment of banks. Professor Stanley Jevons is "of
hat the development of banking organisation in India
reatly stimulated if the Government of India would under-
spection of joint stock banks, to see that proper practices
bserved, and particularly to detect transactions detrimental
ests of depositors and share-holders at an early stage, and
f detection to prevent them". He is followed by Dr.
ter, who is also in favour of the examination of the sugges-
ere should be a department for the registration and inspec-
ited liability companies with a competent staff of auditors
s to detect and penalise fraud. Sir P C Mitter suggests
banks might be enabled to apply to local Governments to
counts audited at least six monthly by approved auditors,
cash should be examined periodically by a Government
that they should be supervised by statutory provincial
with a whole-time staff under them. We do not presume
definite recommendation on a complicated technical ques-
ich we realise that there is much to be said on both sides,
h the last word should be with the expert We are not un-
... the general objection to such proposals, that the best basis
for sound and permanent advance lies in competition, publicity, and

the encouragement of private enterprise, and that they might lead to the creation of banks and companies with directors who were not fitted for the responsibilities of their position and whose incompetence would be presumed to be safeguarded by detailed Government control.

Banking education.

12. We are convinced that the true solution will be found in the provision of a comprehensive scheme of banking education, which will furnish an adequate supply of Indian bankers, trained on sound and modern lines. This would be another useful field of enquiry, on which the opinions of an expert committee might be of utility. It is obviously the most important question of all. One of the first points for consideration is how practical and theoretical training may be combined, and it is most desirable that an all-India Institute of Bankers should be created to supervise courses of instruction. The possibility of the selection of the abler students for practical instruction abroad could also be considered. In this way the development of banks on sound lines would be encouraged. Parenthetically, we would also suggest that the formation of an all-India Institute of Chartered Accountants would appear to provide a means of meeting the suggestion of Dr. Slater referred to in the preceding paragraph. We do not wish to go into further detail on the subject of banking education beyond emphasizing its importance, but we feel that its investigation would lead to useful results.

Investment facilities.

13. In addition to the creation of banks for the receipt of deposits, and the encouragement of small deposits by Post Office cash certificates and the saving bank schemes of the Post Office and the Imperial Bank, increased facilities for investment are also required. As fresh capital must, if progress is to be healthy, be attracted first into investments in which safety is the primary consideration, dealings in government securities should be encouraged, as they possess this quality in the highest degree. If Public Debt Office facilities could be extended to the more important commercial centres outside the Presidency towns, so that all transactions in government securities could be effected locally, local markets would be created for these securities and local stock broking would be encouraged. Stock exchanges would then form naturally and lead to dealings in industrial debentures and ordinary shares. The wider advertisement of state loans in vernacular is a suggestion which might also be examined. We do not know to what extent an advance on these lines is immediately practicable, but we consider that the creation of more money markets throughout India constituted on modern lines would be a factor of such importance in India's financial development that we would recommend the question to the careful consideration of Government.

Credit facilities.

14. The increase of credit facilities on thoroughly sound lines is a matter of no less importance. Necessary safeguards against the dangers inherent in artificial facilities should of course be provided, but there is scope for material improvement in the machinery for the provision of credit. At present miscellaneous credit facilities are afforded to agriculture, either direct by Government or under Government control,

by means of takavi advances and through the provincial co-operative banks, and many schemes have been suggested for the extension of long-term credit to industries either by direct Government assistance or through land and industrial banks These all appear to us to require co-ordinated examination, especially those relating to agricultural credit, so that they may be woven into the fabric of a general banking system

15. It is also worth examining whether the produce of industry and agriculture could be financed by negotiable instruments to a greater extent than at present Mr. B F Madon in his reply has alluded to the desirability of developing trade acceptances and facilities for discounting them —" The public should be trained to create such real trade bills, the local bankers should be made to see the advantages of discounting such bills and the Imperial Bank should be ready to re-discount them ". It seems to us that there could very usefully be an enquiry into the various forms of negotiable instruments circulating in India, with a view to the development of those which were found to be the most suitable. The matter is complicated by the multiplicity of scripts in India. In this connection we would add that the problem of enabling Indians who are only acquainted with vernacular scripts to avail themselves of banking facilities is a general one which appears to us to be of importance and to require early examination. Various devices, some of doubtful practicability, have been suggested to us but there can be no doubt that, whatever the reason may be, negotiable instruments do not take their proper part in the financing of Indian trade, and a general enquiry by legal and banking experts might throw useful light on the subject, and suggest possible remedies.

Negotiable Instruments.

16. This is a very cursory survey of the suggestions we have received in reply to our question regarding the development of banking organisation and credit facilities in India We are not in a position to examine the suggestions in detail or to offer an opinion on them, but we consider that they should be examined as early as practicable The method of the examination we would leave to Government, the points at issue being too numerous and too technical for us to make any more definite recommendations. We are of opinion, however, that the first step required is the collection of accurate and up-to-date information of the progress so far made and a comprehensive survey of the whole field, which we suggest should be undertaken by Government without delay. Such a general survey would at any rate serve to focus public attention on these most important subjects, and would enable Government to determine the questions a detailed examination of which by experts would be most likely to lead to fruitful results. We are satisfied that the preliminary survey must be followed up by a detailed enquiry, but the field is so large that we leave it open whether this detailed enquiry should be entrusted to one or more committees.

Comprehensive survey suggested.

CONTROL OF EXTERNAL CAPITAL.

Objections to external capital.

17. The objections to external capital have been stated to be :—

(a) A certain proportion of the profits will go out of the country.

(b) Investors will always prefer to choose their own directorate, and will naturally prefer men they know and have a prejudice in favour of their own nationality. The tendency will be the same in respect of the superior staff.

(c) The vested interests created by external capital have a tendency to acquire enormous political influence which is usually exercised for the purpose of maintaining the status quo and of vigorously resisting any political progress.

(d) External capital may monopolise 'key' industries or industries important from the point of view of national defence, and

(e) External capital may exploit the natural and irreplaceable resources of the country such as minerals.

8. These are the more important objections which have been made to us and in discussing the question of imposing restrictions on external capital, we would distinguish between the different forms in which it enters India, according to the extent to which it carries with it control over Indian industrial organisation and Indian natural resources. This was the criterion suggested by Dr. Gilbert Slater in his reply and following generally his classification we may divide external capital from this point of view into three categories :—

(1) Investments in which the external investor is merely entitled to a rate of interest and acquires rights of control only when there is default. To this class belong state and municipal loans, bonds of port authorities, bonds and debentures of private companies and bank loans.

(2) Investments in which the external investor enters into competitive business in India, competing on equal terms with Indian enterprise, as in the case of cotton and other textile mills, mercantile houses and the like.

(3) Investments in which the external capitalist acquires special privileges or concessions of land which give him exclusive possession or exclusive rights of exploitation of particular portions of the natural resources of India.

"Where the external investor is entitled to a stipulated rate of interest only.

9. As regards the first class, we agree with Dr. Slater " that it has been largely necessary in the past and is on the whole unobjectionable in the present ". He continues " As no foreign control enters into the question, the main matters for consideration are :—

(1) can a new asset be created by means of an external loan which will yield a net annual return, directly or indirectly, to the people of India exceeding the stipulated rate of interest ? and

(2) can the money be borrowed abroad on the whole to greater advantage than in India ?

If both of these questions are answered in the affirmative, obviously the use of external capital is advantageous." The first class, so far from being disadvantageous is generally useful and profitable to India and no control is necessary. In the case of Government and quasi-Government loans, however, the rate of interest should not be the sole consideration between an external and an internal loan, and the exchange position must always be allowed due weight. If the money can be raised in India without unduly prejudicing the efforts that may be made at the time for securing Indian capital for other useful enterprises in India, and if the difference between the rates of interest is not excessive, resort should be had to rupee loans in India rather than to external loans. It is important that habits of saving and investment should be fostered, and government scrip and well-secured bonds, being good security for bank overdrafts, supply industry with a means of obtaining capital. In short external capital may be advantageously used to supplement internal capital, but should not be allowed to prejudice its legitimate opportunities. This has been generally admitted in the replies, but this category does not cover the most important forms of external investment in India and those on which attention has been most strongly focussed.

Where the external investor enters into ordinary competitive business in India.

20. It would be quite impossible to confine the inflow of external capital to the first category and normally investments will be on a speculative and profit sharing basis in which the shareholders will insist on exercising control, that is to say, will come within the second and third classes. The consideration of these two classes is complicated by the fact that apart from specifically protective duties or bounties, India's general tariff, though framed for purposes of revenue and not protection, has been raised to a level where it does afford a varying degree of protection to every industry of any importance. It has been suggested that the *surplus* profit granted to the external capitalist by governmental action at the cost of the country should be taken from him in taxation or at least expended in some manner directly profitable to India. This question was discussed at length by the Fiscal Commission in chapter XV of their report. They argued that as protection inevitably increased the burden to the consumer, it was desirable that this burden should be terminated as soon as possible, and that as *protection by itself* could not increase the capital in the country, the additions must come from outside. They therefore considered it desirable to widen the field of investment to the utmost and to attract capital from outside, so that industry might be developed as rapidly as possible and the burden to the consumer terminated. On the other hand they allowed that "where Government grants anything in the nature of a monopoly or a concession, where public money is given to a company in the form of any kind of subsidy or bounty, *or where a licence* is granted to act as a public utility company, it is reasonable that Government should make certain stipulations", and "lay special stress on the Indian character of the companies thus formed". There is some inconsistency in this which attracted the attention of the members who wrote the minute

of dissent : " we are unable to appreciate the distinction drawn between companies getting Government concessions and companies establishing themselves behind the tariff wall erected under a policy of protection. We can understand such a distinction under a policy of free trade ". Bounties and protective tariffs are two means of attaining the same end, the fostering of industries in India, and if external capital should be controlled in the one case, it would appear to be equally desirable to control it in the other.

21. Government having accepted the proposition in paragraph 292 of the Report, quoted in the preceding paragraph, we have to consider what stipulations can be imposed which will not have injurious repercussions on the industry or the country as a whole. The problem must be approached on practical lines, and after careful consideration of the various devices suggested for imposing such control, we have come to the conclusion that, except when definite concessions are granted to individual concerns, restrictive measures would be either impracticable or disproportionately injurious to the Indian investor. Where a bounty or definite concession is being granted to a particular company, it is certainly practicable to impose any restrictions desired in return for the concession, but where a general tariff is imposed, and any concern operating in the country will derive benefit from it without the necessity of approaching Government for any special concession at all, no practical method has been suggested to us whereby discrimination could be effected. Numerous suggestions have been made to us. The most general is, that new companies should be registered in India with rupee capital, and that a proportion of the shares sufficient to establish Indian control should be definitely reserved to Indian investors. A less extreme suggestion is that this proportion should be reserved to Indian subscribers in all new flotations for a definite period of time. If after that period Indians had not subscribed their share, the company would be enabled to acquire the remaining capital where it could. Other suggestions are that a definite number of the directorate should be Indian, that facilities should be afforded for the training of Indian apprentices and that penal taxation should be imposed on companies which did not comply with these conditions.

22. The general difficulties in the way of these suggestions are obvious. In the first place they could only be applied to new companies, and it might in many cases be difficult to prevent a big manufacturing concern with a small trading agency in the country taking advantage of such an agency to claim the privileges of an existing company. They would also require a very elaborate system of trade licensing and the most inquisitorial government control. Besides, as pointed out by the Fiscal Commission, a most unfair and undesirable distinction would be created between private and joint stock concerns and it is to the interest of the country to develop the latter. Many new enterprises are started privately and if they are successful it is desirable to encourage them to develop into limited liability companies, as this will give the best opportunity to the Indian investor to purchase shares in the open market and to acquire such control as he desires. It would be quite impossible to ascertain the amount of external capital in private concerns, so that they would

be able almost completely to evade any restrictions imposed. The existence of such restrictions would thus only tend to prevent their development into joint stock companies.

23. It would also be as well to make it clear that the object of such control, as stated by the Fiscal Commission, is to lay stress on the Indian character of the favoured companies and not to secure an artificially high rate of interest to the Indian capitalist. Though the latter could possibly be secured in a protected industry by the elimination of outside capital, we hold strongly that as a general principle the proposition that preferential terms should be secured by statute to the Indian investor is short sighted and involves an economic fallacy. The interests of the Indian investor will best be served by giving him the widest freedom of choice as to the character of his investments and the most open market in which to sell them when he so desires. It should be emphasized that the real criterion of the value of a stock is not only its dividend but also its marketability. A capitalist will require a much higher rate of interest if he does not feel confident that he can realise his principal when he wishes, and any measure which limits the number or the resources of potential purchasers will reduce the value of his holding. Restrictions on the transfer of shares from Indians to non-Indians might possibly increase the yield on the shares of companies in protected industries by limiting the amount of capital in the industry, and thus lessening competition, but this would be largely counterbalanced by their lower sale value. As the entire additional cost would fall on the Indian consumer, the loss to the country would be entirely out of proportion to the gain to the capitalist. Besides, there is the practical difficulty that such restrictions would be almost impossible to enforce. We do not wish to dwell on this at any length as we feel convinced that after consideration of the various factors involved "no one," in the words of the Fiscal Commission, "would advocate a policy of protection merely to enrich capitalists".

24. In addition to these general considerations, there are grave practical objections against each of the various suggestions. Restrictions on the transferability of shares could be evaded by the large capitalist and would only penalise the small investor, both Indian and non-Indian, by increasing the difficulty of finding purchasers, for which brokers would naturally also charge an enhanced commission. They would also involve an intolerable amount of government control and interference with industry. Very limited parallels have been quoted from other countries. In Japan, the shares in certain banks [illegible]
by Government can apparently onl[illegible]
of Government, but it is obviously [illegible]
like this to cover every industrial [illegible] in a large country like India. Our objection to a statut[illegible]

[illegible]

[illegible] consideration. In the words of the Burma Chamber of Commerce—"capital demands the choice of its own directorate, failing which its cost

will be raised, or its supply entirely withheld." As regards apprentices, too, it would be quite impossible to lay down general conditions which would cover the infinite variety of cases involved.

25. We do not understand what valuable purpose would be served by keeping subscription lists open to Indians for a prolonged period (six months has been suggested), if Indian [illegible] subsequently to be allowed to sell the shares allotted to them in the open market without restriction. Indian organisations which chose to underwrite the issues might obtain an enhanced commission, for which the industry would have to pay, and the delay caused to a company before it could get to work would be most injurious. The effects on the ultimate control of the company would be negligible, while it would be difficult to calculate the dislocation to the commercial machinery of the country that would be created by a general provision in the Indian Companies Act that share lists might in certain circumstances have to remain open for six months before a company could proceed to allotment. A more feasible suggestion has been made, which would at any rate avoid the intolerable delays of the previous proposals, that in the event of a list being over-subscribed, Indians might receive on allotment the total amount of their applications up to 50 per cent., of the total issue. This would avoid delay but is inadvisable on general grounds. It would be very difficult for the directors of the company or the Government officer, who had to scrutinise the lists to ascertain in the case of applications of firms or companies whether they came within the classification of Indian or not. It would also be a simple matter for non-Indian investors to arrange for their applications to go through an Indian. Such measures might deter the small external investor but it would be a very simple matter for the larger capitalist to get round them by employing an Indian agency, the net result being that India would have to pay more for its capital by the amount of the commission to be paid to the agent. Our colleague Pandit Madan Mohan Malaviya, who has recorded his dissent to this conclusion in a separate note, holds that, even though the ultimate effect might be small, it should be a condition in all cases in which shares are offered by public companies in India that the subscription lists should be kept open for a minimum period of 30 days, and that preference should be given to Indian subscribers up to 50 per cent. of the amount of shares offered. He recognises that the further step of preventing transfers thereafter from Indians to non-Indians cannot be recommended but he holds that even without this further condition there would be some residuum of additional Indian holdings as the result of the imposition of the special condition regarding original subscribers.

26. Penal taxation, also, would be almost impossible to assess. It would be incorrect to assume that the whole of the customs duties or the protective tariffs or bounties constituted the net surplus of the home manufacturer as against the outsider, as production in India in certain industries is admittedly more expensive than it is in the competing countries. In a theoretically perfect protective system the net surplus would be nil, the tariff being framed to meet the extra cost of production. In any case, such taxation would be un-economical as the cost of assessment and collection would almost certainly exceed the revenue produced.

All these nebulous suggestions for penal taxation or licences suffer from the same defect. As the entry of external capital into India is at present determined by free market conditions, there is not, as is [illegible] external capital whi[illegible] eturn India may [illegible] been materially [illegible] keen. There is als[illegible] finite tendency for external capital to become increasingly shy of seeking outlets in India. Discriminatory taxation would have a far wider influence in restricting the flow of future capital into India than its mere pecuniary effects. There would be the fear of future developments on the same lines, and as the largest amount of external capital which comes into India at present is probably the re-investment of past profits and the replacement of the depreciation of previously invested capital, the former [illegible] for a higher immediate ret[illegible] to the industrial developme[illegible] scare away the external capital invested in it or prevent the local investment of its profits.

Where definite concessions are granted to the external investor.

27. Where, however, definite concessions are granted to particular concerns, it is obvious that stipulations to safeguard Indian interests can be imposed without any practical [illegible] long [illegible] fore [illegible] ture [illegible] sions [illegible] bring [illegible] which the external investor acquires special concessions of land or privileges.

We would divide this class into two :—

(1) where the foreign capitalist acquires a definite pecuniary concession such as a bounty, and

(2) where he acquires a concession which will enable him to exploit a wasting asset, such as a mineral concession.

28. In the case of bounties or similar definite pecuniary assistance, we consider that restrictions might be imposed of the nature described in Section 5 of the Steel Industry Protection Act of 1924, namely,—

(1) in all cases facilities for the technical training of apprentices, and

(2) in the case of incorporated companies—

(i) that the companies should be registered under the Indian Companies Act of 1913 with rupee capital, and

(ii) that a reasonable proportion of the directorate should be Indian.

29. The requirement that a proportion of the directorate should be Indian is an exception to our general conclusion that share-holders should be given unfettered power to choose their own directorate. It's

might seem more logical to insist on a certain proportion of Indian share-holders, but as we have shown we do not consider it desirable or practicable to impose any conditions to secure this. It might also be held that the interests of the nation would be sufficiently secured if the companies were registered in India under the Indian Companies Act with rupee capital, as this will mean that the shares will be offered for subscription in the first instance in India and that the great majority of the transactions will be effected in Indian stock exchanges. We do not however think that the theoretical objections to the proposal are sufficient to justify our recommending a reversal of the declared policy of the Government of India and the Legislature, and insistence on a certain proportion of the directorate being Indian is a rough and ready practical method of ensuring that Indian interests will not be over-looked. But we would not go beyond the conditions suggested by both the Fiscal Commission and the minute of dissent to it that the number of directors and the facilities for training should be reasonable. They would have to vary from case to case, depending on the nature of the work and the extent of the concession granted by Government. It would be unreasonable to impose any definite proportion and the details will have to be left to the discretion of Government in each case.

30. As regards mining and similar concessions we are of opinion that no definite principle can be prescribed. It must be decided in each case whether it is better from the point of view of the national interest that a concession should be developed by external capital or left to lie fallow, supposing that to be the only available alternative. In the latter case the loss of interest and wealth to the country through the locking up of potential resources must be considered. It must also be remembered that *primâ facie* the best market for the produce will be local. Such enterprises are by no means invariably successful. They are generally highly speculative and there are as many losses as successes. It is to the interest of the country that its natural resources should be prospected and if external capital is willing to undertake this task, while indigenous capital is unwilling, it must be allowed to set the prospect of profits against the risk of loss. We consider that this is a matter which must be dealt with by the expert departments concerned, either of the provincial or the central Governments, the general criterion being that concessions should only be granted to external concerns where it is clearly in the national interest that they should be developed and where internal capital is not forthcoming on reasonable terms, and then only subject to such safeguards as may be suitable for each case.

PART III.

Summary of Recommendations.

The conclusions which we have reached may be summarized in the following propositions.

I. It is more advantageous to India that its requirements for new capital should be supplied from internal rather than from external sources, so far as internal capital is forthcoming. The real solution of the problem of external capital lies in the development of India's own capital resources.

II. Subject to the limitations given below the inflow of external capital is not only unobjectionable in itself but is a valuable factor in assisting the economic development of India.

III. Though in certain circumstances the control of external capital may be necessary in the interests of India, general measures discriminating against it or penalising it either by way of taxation or by way of control would, so far from assisting the development of these resources or fostering the interests of the Indian investor, be definitely injurious to both, as they would impede the growth of new industries and restrict the transferability and consequently the market value of the holdings of the Indian investor.

IV. India possesses a vast store of dormant capital awaiting development, and in order to make this available for investment banking facilities must be increased and extended. The examination of the various technical measures suggested in the replies with this object is outside the scope of the Committee, but we would emphasize the importance of a co-ordinated survey being *undertaken* at the earliest opportunity of the whole field of banking in India. This should be followed by a detailed examination by an expert committee or committees of the lines along which progress should be effected.

V. As regards the control of external capital, where the external capitalist is merely entitled to a stipulated rate of interest, and only acquires rights of control when there is default, as in the case of state and municipal loans, bonds and [illegible]

VI. Where investment carries with it the control of an undertaking, we consider it reasonable that when Government grants particular concessions to the industry of which that undertaking forms part it should exercise such control over the undertaking as will ensure that the benefits of the concession accrue primarily to the country.

(a) Where the concession is general, as in the case of a protective tariff (and this would include practically every industry in India, as a revenue tariff without a corresponding excise has a protective effect) it is

impracticable to effect any discrimination. No feasible suggestions for such discrimination have been suggested to us, nor have any occurred to us during our discussions.

(*b*) Where definite pecuniary assistance, such as a bounty, is granted to any particular undertaking, we consider that discrimination is feasible, and we agree with the Fiscal Commission and the Legislature that no such assistance should be granted to any company, firm or person not already engaged in that industry in India unless

I. reasonable facilities are granted for the training of Indians, and

II. in the case of a public company unless

(*i*) it has been formed and registered under the Indian Companies Act 1913,

(*ii*) it has a share capital the amount of which is expressed in the memorandum of association in rupees,

(*iii*) such proportion of the directors as Government may prescribe consists of Indians.

(*c*) Where a concession is granted to exploit a wasting asset, such as a mineral concession, no definite rules can be prescribed. It must be a question in each case whether it is better from the point of view of the national interest that a concession should be developed by external capital or left until indigenous capital may be prepared to develop it. Such concessions should only be granted to external capitalists when it is clearly in the national interest that they should be developed.

VII. We do not consider it necessary to examine in detail the measures to be taken to give effect to these recommendations as we do not suppose that any general legislation will be necessary. If Government accept them, the necessary legislative and executive steps can be taken to give effect to them on each occasion when a bounty or similar concession is granted.

BASIL P. BLACKETT.
C. B. CHARTRES.
W. CURRIE.
*T. C. GOSWAMI.
C. A. INNES.
P. S. SIVASWAMI IYER.
*MADAN MOHAN MALAVIYA.
DWARKANATH MITTER.
G. A. NATESAN.

J. B. TAYLOR,
Secretary.
26th September, 1925.

* Subject to separate note

NOTE OF DISSENT BY PANDIT MADAN MOHAN MALAVIYA.

In the course of the discussions on the Steel Industry Protection Bill the Honourable Sir Charles Innes said :—" The House will remember that yesterday, in the course of the debate, Government were pressed to incorporate in the Bill provisions on the lines of paragraph 292 of the Fiscal Commission's Report and on the ... Honourable Mr. Chatter- ... I explained yesterday ... ort matter of this kind ... the Bill. But we have considered the matter again. We recognise that this is a matter on which the House feels strongly, and we have decided to do our best to meet the wishes of the House. In order to meet the House half-way, I am prepared to agree to the amendment of which the Honourable Pandit Motilal Nehru has given notice, and I hope the House will observe that this amendment honours strictly the obligation laid upon Government by the statement of Mr. Chatterjee." That amendment which now forms section 5 of the Steel Industry Protection Act was as follows :—

"Notwithstanding anything contained in section 3 or section 4, no bounty in respect of steel rails, fish-plates or wagons shall be payable to or on behalf of any company, firm or other person not already engaged at the commence...
ness o...
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Gover... training of Indians in the manufacturing processes involved in the business and, in the case of a company, unless—

(a) it has been formed and registered under the Indian Companies Act, 1913 ; and

(b) it has a share capital the amount of which is expressed in the memorandum of association in rupees ; and

(c) such proportion of the directors as the Governor-General in Council has by general or special order prescribed in this behalf consists of Indians."

Both the Government and the Legislature definitely adopted the policy embodied in the amendment when they agreed to it. But there was one important point left outstanding for consideration. So the Honourable Sir Charles Innes went on to say :—" I am aware that there are sections in the House which would like to incorporate in the Bill specific provisions regarding the proportion of foreign capital. I am prepared to take up separately the examination of questions of that kind and in that examination I am prepared to associate with the Government a Committee of the Legislature appointed *ad hoc* for the purpose." It is in fulfilment of this promise that the present Committee was appointed. The main question there- fore which this Committee had to consider was ... should be adopted ...
be ...
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... conclusion that

"except when definite concessions are granted to individual concerns, restrictive measures would be either impracticable or disproportionately injurious to the Indian investor." They go on to say :—" Where a bounty or definite concession is being granted to a particular company it is certainly practicable to impose any restrictions desired in return for the concession, but where a general tariff is imposed and any concern operating in the country will derive benefit from it without the necessity of approaching Government for any special concession at all, no practicable method has been suggested to us whereby discrimination could be effected. Numerous suggestions have been made to us. The most general is that new companies should be registered in India with rupee capital, and that a proportion of the shares sufficient to establish Indian control should be definitely reserved to Indian investors. A less extreme suggestion is that this proportion should be reserved to Indian subscribers in new flotations for a definite period of time. If after that period Indians have not subscribed their share the company would be enabled to acquire the remaining capital where it could." My colleagues give three reasons for not accepting either of these suggestions. In para. 22 of their report they say :—" In the first place, they could only be applied to new companies, and it might in many cases be difficult to prevent a big manufacturing concern with a small trading agency in the country, taking advantage of such an agency to claim the privileges of an existing company." I regret I do not agree. This difficulty is not likely to arise in many cases. It might arise in some and it can be provided against. The present capital of every existing public company is known. The conditions that may be laid down to secure a fair proportion of the shares to Indians can be made to apply to the additional capital which the company may wish to raise. My colleagues go on to say :—" Besides, as pointed out by the Fiscal Commission, a most unfair and undesirable distinction would be created between private and joint-stock concerns and it is to the interest of the country to develop the latter." I do not believe that if restrictions like those suggested are imposed, any considerable number of concerns are likely to be started as private concerns. There is little likelihood of individual firms providing the whole capital needed. I am not satisfied that in the great majority of cases there will be any real difficulty in carrying out the suggestions mentioned above, and I am clearly of opinion that they can and should be given effect to.

So long as the policy of free trade was followed by the Government of this country, matters stood on a very different footing from that on which they do now. As a policy of protection of industries by tariffs and bounties has now been adopted, the Government is bound in fairness to the general consumer to see that the industries which shall benefit by such tariffs are either wholly or at least largely Indian, both in the matter of capital and control. The very foundation of protectionism, as has been said by eminent economists, is the idea of nationality. In the words of Professor Bastable " to understand the position taken up by the modern opponents of free trade, it is, above all, essential to recognise that the keynote of their system is nationality..... The claims of the nation as a whole are accentuated and regarded as far more important than those of the

individual or the world at large. How perfectly this attitud harmonises with the actual policy of the European, and indeed o all protectionist states, is apparent. A particular industry is suffering under the pressure of foreign competition, *i e*, a national interest is affected The State then steps in by imposing additional duties on the foreign product, the loss to individual consumers and to the world as a whole being disregarded as unimportant." Again protection is justified because it increases the national capacity to produce. "Complete commercial freedom may give the greatest amount of value at a given time, but a wise restrictive policy will increase the production of wealth in the future, present loss will in this way be more than recompensed by subsequent gain. The use of protection is substantially a *national* apprenticeship and should be judged in that light."

When we Indians asked for protection we did so in order to promote Indian enterprises with Indian capital and under Indian control The Government of India understood us correctly and agreed with us Speaking in 1916 on the resolution which led to the appointment of the Industrial Commission, Sir William Clarke, the then Member of Commerce, said: "The building up of industries where the capital, control and management should be in the hands of Indians is the special object we all have in view" He deprecated the taking of any steps which might "merely mean that the manufacturer who now competes with you from a distance would transfer his activities to India and compete with you within your own boundaries." In concluding my note appended to the report of the Industrial Commission I said. "I cannot conclude this note better than by endorsing the following generous and wise words of Sir Frederick Nicholson. 'I beg to record my strong opinion that in the matter of Indian industries we are bound to consider Indian interests firstly, secondly and thirdly I mean by 'firstly' that the local raw products should be utilised, by 'secondly,' that industries should be introduced, and by 'thirdly', that the profits of such industry should remain in the country'." We did not ask for the introduction of productive duties in order to benefit foreigners, nor did the majority of the Indian Members of the Fiscal Commission recommend that such duties should be introduced for the benefit of foreigners The following paragraph from the minute of dissent of the minority of the Commission is important. "There is one aspect of the question to which attention must be drawn. If our colleagues' recommendation is accepted it will be open to every foreigner to establish manufacturing industries in India by means of companies incorporated in their own countries and in their own currency This danger did not exist under a policy of free trade, but it is bound to materialise when the benefit of protective duties becomes available We may have under such circumstances companies incorporated elsewhere, say in America in dollars, in France in francs, in ly in liras, in Germany in marks, in Japan in yens and in na in dollars, etc. *It will be also possible for these companies to in their whole capital in their own countries and thus carry away entire profit of manufacturing industries established behind the wall The consumer will have paid a higher price, due to protective duties, and the entire manufacturing profit will have gone f the country* We cannot obviously understand how under

such conditions "the main and ultimate end, *viz.*, the enrichment of the country will be attained." (Paragraph 293). *We would venture to assert that India cannot possibly be expected to adopt a policy which is likely to lead to such a result.*" Further on they said : "We believe there will be no difference of opinion on the point that *Indian capital should have full scope for investment in Indian industries, and that foreign capital should only supplement it to accelerate the pace and to provide the early relief of the burden on the consumer.* We do not apprehend any danger of the kind indicated in the report, *i.e.*, that such a policy will lead to the formation of private companies. There is in our opinion very little likelihood of individual firms providing the whole capital themselves by registering private companies. If however such a contingency arises it can only mean that the profit of the enterprise is expected to be so substantial that the promoters desire to keep the whole of it to themselves and carry it away to their own countries. If such a danger materialises and foreign firms resort to such expedients, we think that the Government of India should by means of legislation or otherwise take steps to put a stop to it. *No foreign country should be allowed to monopolise the profits due to the policy of protection in India and at the cost of the Indian consumers.*" In order that this object should be achieved, it is not only necessary that a reasonable proportion of the directors of every new company which may be formed hereafter in India should be Indians, but also that at least half of the share-capital should be reserved to Indian subscribers for a definite period of time. If after that period Indians have not subscribed their share, the company should be free to acquire the remaining capital where it could. In support of my view I would also refer to the English Overseas Trade (Credits and Insurance) Act, 1920. In that Act it was definitely—"Provided that no credit shall be granted by the Board (to be constituted under the Act)

> (*ii*) to an alien, or to a firm in which the majority of the partners are aliens, or to a company where British subjects do not form a majority of the directors, or where a majority of the voting power is not in the hands of British subjects."

I also wish to emphasise that the adoption of a policy of protection of industries by tariffs and bounties more than ever makes it the bounden duty of Government that it should provide sufficient banking and credit facilities to Indians and encourage them to build up indigenous industries. In this connection I particularly invite attention to the valuable opinion of Sir Dinshaw Wacha contained in paragraph 6 of his letter which I quote below :—

"Measures essential to attract indigenous capital for development of banking organisation and credit facilities in India may be devised in the following ways :—

> (*a*) By institution of as many banking institutions as may be deemed necessary from time to time on a sure and sound foundation. For such a purpose it will be imperative to introduce *special legislation* regarding borrowing and lending of a character which while sufficiently elastic shall fully safeguard the interests of

depositors and shareholders alike, thus inspiring the highest confidence among them.

(*b*) Beyond such local banking concerns, as just suggested, it is exceedingly desirable that there should be in the important capitals of the different provinces, which have extensive trade and industries, banks with a capital at least of 5 crores of the type and nature of the German Deutsche Bank which, it is superfluous to state, has immensely converted Germany from an agricultural into an industrial country. Banks of this character alone, in the long run, when established on sound foundations, managed by recognised experts in different branches of industry, will be able to give similar results to India as those afforded to Germany. Simultaneously, it is also essential that India should possess agricultural banks, with their kindred auxiliaries or feeders in each province of the Empire, say, with a capital ranging from 2 to 5 crores at the outset. Such banks should be modelled broadly on the lines of the Agricultural Bank of Egypt, so beneficially fostered by the late Earl Cromer Of course, the local conditions of each province will have to be taken into consideration Co-operative Central Banks may serve the useful purpose of fertilisers to each Agricultural Bank."

Dr Gilbert Slater also has in his valuable note recommended among other things, the " development of Indian joint-stock banking by the adoption of methods similar to those employed in Germany by the 'D. Banks',—the Deutsche, Dresdner and Disconto Gesselschaft "

The development of banking organisation and credit facilities is the most crying need of India. In the third edition of his valuable book on Indian Finance and Banking, which was published in 1920, Mr. G. Findlay Shirras correctly described the system of banking existing in India A glance at the chart published in the frontispiece of his book would show how deplorably low the banking position in India was in comparison with that in Canada, Australia, Japan, the United Kingdom and the United States To notice the differences in the case of one alone, while the banking ...

... amounted in India to £118 million, in Japan to £401 million. The number of banks in India was 359, in Japan 5,874. I am unable to say what differences the last five years have made. But the position of India has not much improved and is still lamentably low, and this is not the first time that the attention of the Government is being drawn to the need of having the question of the proper development of banking institutions in India duly investigated. But unfortunately the action that was needed has not yet been taken I hope our recommendations on this subject will meet with a better fate. To strengthen that hope I will draw attention to some of the recommendations which were

previously made. Before doing so, I wish to add that notwithstanding the creation of the Imperial Bank of India with its enhanced capacity and usefulness, the question of a State Bank for India still deserves to be considered.

As Mr. Shirras has pointed out in his book, in 1870 a member of the Viceroy's Executive Council (Mr. Ellis) wrote in connection with the proposal for an amalgamation of the Presidency Banks :—" The change which I advocate as the best is the establishment of one State bank for India with branches at the Presidency towns. I do not by this contemplate the creation of an expanded Bank of Bengal. I believe the Bank of France would provide a model which, with suitable modifications, might be adopted in India."

In an article on " A State Bank for India," *The Times* wrote in March 1913 : " There can be no question that a State bank would have a most salutary effect in securing the confidence of the people with money to invest. India suffers from a vast amount of infructuous capital which a State bank would be likely to draw forth in the shape of shares or deposits. Hitherto, the investment of money by deposit in banks has been on a much smaller scale than it ought to be...... Another great advantage would be a far better utilisation of the capital of the concern than is possible in the case of the three Presidency banks with their existing limitations. The central institution would have branches in every part of India, and would be able to let the capital flow in the directions where it was most needed. The facilities it would have for financing trade would go far to eliminate the sharp seasonal divergences between discount rates in India. Given a State Bank with large capital and plenty of resources, the Government could again keep its headquarters balances in bank custody without any apprehension of monetary disturbances in consequence of withdrawals, and on the other hand, it would be able to depend on the bank to advance money if the needs of the State momentarily required the assistance."

The Chamberlain Commission said in their Report in 1914 that they regarded " the question, whatever decision may ultimately be arrived at upon it, as one of great importance to India, which deserves the careful and early consideration of the Secretary of State and of the Government of India. We think, therefore, that they would do well to hold an enquiry into it without delay, and to appoint for this purpose a small expert body, representative both of official and non-official experience, with directions to study the whole question in India in consultation with the persons and bodies primarily interested, such as the Presidency Banks, and either to pronounce definitely against the desirability of the establishment of a State or Central bank in India at the present time, or to submit to the authorities a concrete scheme for the establishment of such a bank fully worked out in all its details and capable of immediate application."

In 1918 the Indian Industrial Commission recommended " the appointment at the earliest possible date of an expert Committee to consider what additional banking facilities are necessary for the

initial and for the current finance of industries; what form of Government assistance or control will be required to ensure their extension on sound lines as widely as possible throughout the country; and whether they would be of provincial or of imperial scope, or whether both these forms might not be combined in a group of institutions working together."

In March 1919, a resolution was brought forward by the Hon'ble Mr Sarma in the Legislative Council urging the appointment of a committee to recommend the measures required for organising and developing the banking system of the country. The then Finance Member (Sir James Meston) said the Government was prepared to accept the recommendation of the Industrial Commission and to act upon it. As regards a State Bank, he said he must leave the question "for the present," on the ground that the hands of Government were full with questions relating to the reforms. But no action has been taken in respect of either the one or the other.

It is a matter for real regret that notwithstanding the weighty recommendations referred to above, this question has not yet received from Government the attention which it so obviously deserves. Nothing more vitally affects the welfare of the people of India than the question of the healthy growth and expansion of national commerce and industries, and nothing is more urgently needed to make that growth possible and to sustain it than a sound system of national banking and finance, which should take note of and provide for the financial needs of the people in all important branches of their commercial and industrial existence. I earnestly hope that as this committee has the advantage of being presided over by the Finance Member, and of having the Member of Commerce also on it, its recommendations on the subject of banking will receive the early attention of Government, and that a committee, so composed that it might command the confidence of the public, will be soon constituted to deal with this most important question.

15th September 1925

MADAN MOHAN MALAVIYA.

NOTE BY Mr. T. C. GOSWAMI, M.L.A.

Generally speaking, I agree wih the propositions as stated in the Report. I was elected to the Committee on the resignation of the Honourable Mr. Patel, after the questionnaire had been framed and answers to it had been received by the Committee I found that the terms of reference as interpreted—which I was bound to accept—practically excluded any form of first-hand inquiry as to the extent that foreign capital has a hold on India, as to how far such a hold has benefited India and as to how far it has been injurious. We were, therefore, reduced to a more or less theoretical formulation of propositions relating to the uses and control of external capital in India.

2. We have, however, made some important proposals and indicated lines on which thorough inquiry is desirable We all agreed—and some of us urged very strongly—that an inquiry into the existing banking system should be undertaken with a view to arriving at definite conclusions as to how Indian credit can be further developed and facilities for investment improved. I desire to emphasise this suggestion .

It is said in the Report, that "Considerable progress has been effected by the creation of the Imperial Bank and the opening of new branches" (paragraph 9). While I do not controvert the statement as such, I should like to express the common belief—for which I know there is good foundation in actual facts—that racial and political discrimination is made in the matter of credit, and that Indians usually do not receive in matters of credit the treatment that their assets entitle them to, while, on the other hand, British businessmen have frequently been allowed larger credit than what on ordinary business principles they ought to have got This is a matter for inquiry. Whether this state of things can be altogether remedied in the present political position of India is, however, a difficult question to answer.

3. With regard to leases *already granted* by Government, whether of mines or of forests, it is necessary for the public to know the details of each transaction Leases have been granted at ridiculously low rents, which cannot be explained away by the plausible theory of development and of the risks of enterprise. There are cases in Assam, for instance, which require examination I go further; not only would such an inquiry indicate steps that may be taken in the future to safeguard India's interests, it would, perhaps, reveal cases where the sanctity of existing contract is flagrantly vitiated *ab initio* by unconcionable favouritism.

4. My esteemed colleague, Pandit Madan Mohan Malaviya, has appended a Note to the Report suggesting that it should be a condition in all cases in which shares are offered by public Companies of India, that the subscription lists should be open for a minimum period and that preference should be given to Indian subscribers up to 50 per cent. of the amount of shares offered The argument that this would be an illusory protection, since shares can subsequently change hands and *benami* transactions are to a large extent unavoidable, has great

force ; and Panditji recognises this. I agree with Panditji that the effect of his proposition cannot be totally neutralised by these devices. But I do not know if what Panditji suggests is the best mode of securing the object which some (at any rate) of the Members of the Committee have at heart. I confess, however, that so far I am unable to suggest an alternative.

T. C. GOSWAMI.

The 14th September 1925.

The foregoing note was received from Mr. Goswami after the report of the Committee had been signed by all the other members and was ready for publication, and only awaited his signature which had been promised by telegram as he had left Simla before the final proof was ready. At the last meeting of the Committee the Report was agreed to unanimously by all the members subject to some verbal corrections and to the additional note appended by our colleague Pandit Madan Mohan Malaviya. No mention was then made by Mr. Goswami of his desire to append any note. Mr. Goswami attended all the meetings of the Committee except the first at which the questionnaire was discussed. At no time during those meetings did he raise any question as to the interpretation of the term of reference, or make any mention whatsoever of his present allegations regarding racial and political discrimination in the granting of credit and favouritism in the granting of leases.

This explanation, which seems necessary in fairness to the Committee as a whole, is added by me after consulting with those members who are still in Simla (*viz.*, Sir Charles Innes, Sir Sivaswami Iyer, Pandit Madan Mohan Malaviya, Dr. Dwarkanath Mitter, Mr. Natesan and Mr. Chartres).

BASIL P. BLACKETT.

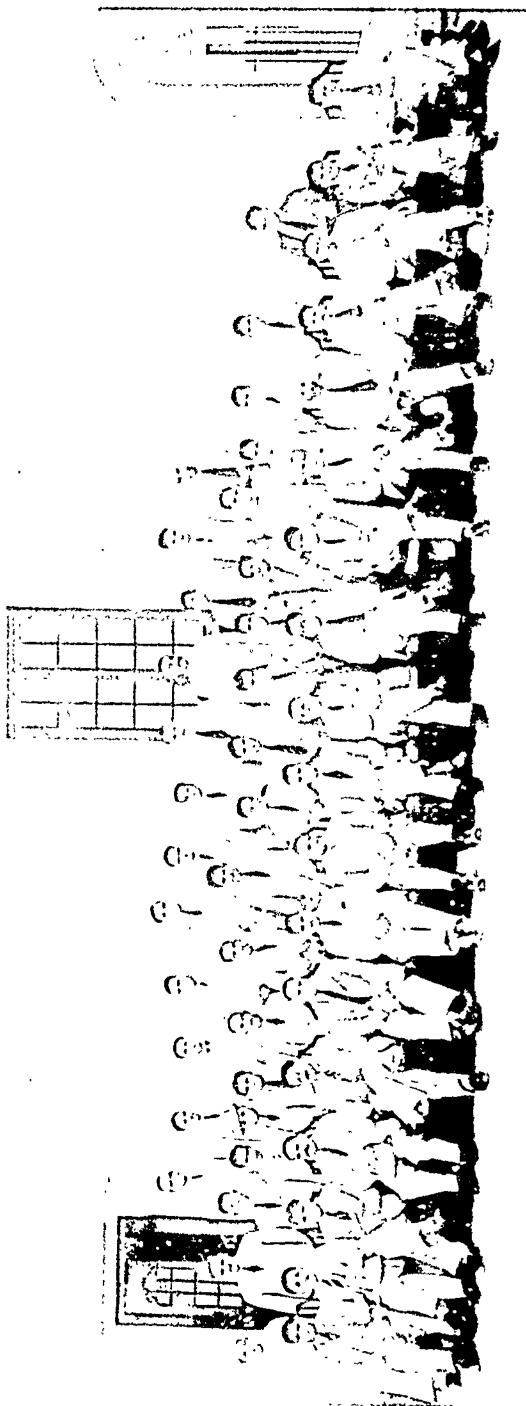
The 19th September 1925.

APPENDIX.

List of Associations and Individuals who replied to the Questionnaire.

The Burma Chamber of Commerce, Rangoon
The Karachi Chamber of Commerce.
The Bengal Chamber of Commerce.
The Indian Merchants' Chamber, Bombay.
The Northern India Chamber of Commerce.
The Marwari Chamber of Commerce.
The Chamber of Commerce, Bombay
The Bengal National Chamber of Commerce.
The Upper India Chamber of Commerce.
The Marwari Association, Calcutta.
The East India Cotton Association, Limited, Bombay.
The Millowners' Association, Bombay.
The British Indian Association, Calcutta.
The Bombay Native Piece-goods Merchants' Association.
The Indian Association, Calcutta
The Fiscal Reform League, India.
The Bombay Stock Exchange, Limited.
The Port Commissioners, Calcutta.
The Port Commissioners, Rangoon.
The Port Commissioners, Chittagong.
The Madras Port Trust.
The Calcutta Improvement Trust.
The Bombay Improvement Trust.
The Bombay Port Trust.
The Bihar and Orissa Co-operative Bank, Limited, Patna
Dawsons' Bank, Limited, Pyapon.
The Karnani Industrial Bank, Limited, Calcutta.
Sir Dinshaw Wacha, Kt., Bombay.
Professor H. Stanley Jevons, University of Rangoon, Economics Department.
Raja Reshee Case Law, C.I.E., Calcutta.
M. M. Roy, Esquire, M.Sc, Government Commercial Institute, Calcutta
Dr. Gilbert Slater, Oxford.
Sir P. C. Mitter, Kt., C.I.E., Calcutta.
Professor K. T. Shah, Professor of Economics, Bombay University.
H. Sinha, Esquire, Lecturer, Calcutta University.
J. C. Sinha, Esquire, Economics and Politics Department, Dacca University.
B. F. Madon, Esquire, Bombay.
Biharilal Batra, Esquire, Lahore.
S. W. Haji, Esquire, Delhi.
H. L. Chablani, Esquire, M.A., Economics Department, Delhi University.
B. Mukerji, Esquire, M.A., Editor, United Provinces Co-operative Journal.
B. Ramchandra Rau, Esquire, Calcutta.

L3ECC—100—17-9-25—GIPS



Proceedings of the fourth Joint Conference of the Central Marketing Staff and Senior Marketing Officers in provinces and States held in Delhi (Old Secretariat Buildings) from 11th to 14th April 1938.

The Conference opened at 11 A.M. with Sir Bryce C. Burt, C.I.E., I.A.S., Vice-Chairman, Imperial Council of Agricultural Research in the chair. A list of officers who were present is annexed (See page 11)

The *chairman* in opening the conference said that it was a great pleasure to welcome to the Fourth Conference the Marketing Officers from provinces [illegible]

considered the method in which the preliminary conclusions reached as a result of the marketing surveys could be put into practice. The *chairman* said that at this conference the practical application of such conclusions and other developmental work would be discussed. He was glad to notice from the re- [illegible]

and marking under the Agricultural Produce (Grading and Marking) Act, applying to such commodities as fruits, eggs, ghee, hides, tobacco, the setting up of standard contracts for those other commodities which constituted the main trade of the country, *e.g.*, wheat, linseed and groundnuts, thirdly the establishment of regulated primary markets and the question of market in- [illegible]

receiving sets in suitable cotton markets in Bombay, Punjab and Central Provinces from which there would be regular broadcasts from the next season. Incidentally the *Chairman* mentioned that those provincial officers who intended to do development work in the direction of broadcasting should apply first to the Controller of Broadcasting for permission before actually starting work.

Item I of the Agenda.

Mr. Livingstone then introduced the Annual Report of the Central Marketing Staff and the summarised reports of the provinces and States, which had been issued as a priced publication (6 annas a copy). He drew particular

attention of the Marketing Staff to the recommendation of the Advisory Board in regard to the form in which the provincial reports should be prepared, *viz.*,

(*a*) Each report should summarise briefly the work done during the year—including miscellaneous work—and state the position as regards the various surveys in progress at the end of the year.

(*b*) Observations on major problems and general recommendations by local Marketing Officers should not be included unless they were the considered opinion of the department concerned.

(*c*) Separate reports of Marketing Officers in charge of different groups of commodities should, as far as possible, be consolidated into one report.

(*d*) Budget statements need not be included in the annual reports.

He then summarised the progress of work made since 31st December 1937. (See circulated paper No. 1, page 15).

With regard to cotton he said that since the proposed scheme had been referred, by the Indian Central Cotton Committee, to commercial bodies for their opinion there was no immediate necessity for the provinces and States to take up marketing survey for that commodity.

The *Chairman* then invited a discussion particularly in regard to the issue of the all India reports and the following decisions were arrived at :—

(1) There is no objection to any local Government or Marketing Staff reproducing in full or part the all-India survey reports issued by the Agricultural Marketing Adviser so long as the source was acknowledged.

(2) It was decided that the All-India Linseed Report (abridged), should also be issued by the Central Staff in Bengali, Hindi, Urdu and Mahratti. The Central Staff would issue vernacular versions of other All-India reports (abridged) in one or more languages and it should be left to the local staff to publish them in such other vernaculars as may be found necessary.

(3) After the Central Staff have issued press notices at the time of publication of various All-India survey reports, the provincial/State staffs should issue longer press notes or reviews to give publicity to the published report. The press notes given by the Central Staff to the Principal Information officer are merely to introduce the report to the general public but the local marketing staffs should publish summaries containing points of special importance in relation to their respective province or State.

Item 2 of the Agenda.

Mr. Livingstone then introduced the item relating to programme of future marketing surveys. (See circulated paper No. 2, pages 15—16).

Sir Bryce Burt particularly drew attention to the coconut survey which he desired to see completed without further delay, and it was agreed that local survey reports in respect of this commodity would be furnished to the Central Staff by the end of June 1938. With this change the time table (see pages 15—16) of the publication of all-India survey reports, as put up by the Agricultural Marketing Adviser, was agreed to *Mr. Livingstone* stated that he had

received suggestions from time to time to take up surveys in regard to (i) pulses, [illegible]

possible to development work in respect of the commodities already surveyed there was no scope for taking up any new commodity for general survey.

Mr Harchand Singh suggested that chillies be taken up, while *Mr Fotedar* suggested a survey for walnuts *Mr Malik* proposed that cardamoms be added to the programme of survey work After some discussion it was agreed that Kashmir might take up walnut survey for which such help as was possible would be given from the Centre As for chillies, the subject was considered of all-India importance but could not be taken up for the present. If however the Patiala Government felt it necessary to proceed with a local survey the Central Marketing Staff would give as much assistance as possible, and

it might be taken up at the next meeting and that in the meantime the Senior Marketing Officer, Bengal, would go into the question of production figures and how to obtain them

Mr. Malik raised the question as to whether the Provincial Staff were required to write reports on lac and jute The *chairman* said that in the case of Bengal this would not be necessary as the special staffs for jute and lac would be operating extensively there The Provincial Marketing Staff would, however, be expected to assist and supply information on various points

Item 3 (a) of the Agenda.

Mr. Livingstone said that as regards standardisation of contract terms there was a conference with the representatives of grain and oilseeds trade last week when it was agreed that all "futures" and delivery contracts made henceforward in respect of May 1939 and subsequent deliveries, should conform to the All-India Standard Contracts for wheat and linseed. As regards groundnuts, revised proposals were placed before that conference and it was decided to obtain the views of the associations concerned Thereafter another conference would be held in Madras to settle the final terms.

He desired that negotiations with trade associations and others on the question of standard contract terms might remain with the Central Staff This was agreed to on the understanding that in cases where agreement had been reached (e g , wheat and linseed) the various marketing staffs should take steps to have the standard terms adopted by local associations of traders and manufacturers.

Item 3 (b) and (g) of the Agenda.

Mr Livingstone reminded the members that the Central Staff had taken up the working of the grading stations only for a short experimental period, with the hope that thereafter these stations would be taken over and continued by the provinces, States concerned or by the trade He drew attention to the proposed list (see pages 17—18) of grading stations for this year, in running which the Central Staff would assist to a limited extent only He invited officers to propose any alterations in the list if they liked He, however, drew attention to the fact that the funds at his disposal were limi-

Mr. Nair considered that in his province (Central Provinces) there was ample scope for grading *groundnuts, oranges* and *hides* He intimated he was trying to open a *ghee* grading station also at Saugor.

He raised the question of railway transport of perishables like oranges from Nagpur and thought that wooden wagons with collapsible shelves and proper ventilation were necessary.

It was considered that the question of transport of perishables was linked up with that of containers and that it might be left to a Sub-Committee if necessary.

Mr. Sapra desired that in view of the good work done last season the provision of about Rs. 150 for a grape grading station at Sheikh Mohammadi be made.

Dr. Hira said that proposals for a *hide* grading station at Karachi were before his Government.

Mr. Hpu stated that there was room for *orange* grading in Shan States, but the problem of containers presented itself here also.

He observed that Burma was interested in rice grading and would watch with interest the grading work in India.

The meeting then adjourned till the next day

The Conference met again in the morning of the 12th April, 1938, at 11 A.M., with Sir Bryce Burt in the chair.

The discussion on item 3(*b*) and (*g*) was resumed.

Mr Kidwai (Baluchistan) stated that a grading station for *grapes* at Quetta was desirable. As peaches could also be graded at the same time, it was agreed that he would submit proposals for a combined grape and peach grading station

Mr. Mohiuddin regretted he had no fruit to grade, but informed the house that he w ... With regard to ... tobacco could be ... the extension o ... correct figures for this first.

As *Mr. Mohiuddin* desired that figures about the number of packages, etc. graded and the premiums obtained for the graded produce were useful, the Agricultural Marketing Adviser agreed to publish the necessary particulars in the form of a short report in the monthly Marketing Notes as each experiment was finished.

Sardar Harchand Singh said that his State was anxious to grade *ghee* and was prepared to open a State Laboratory at Narnaul. He stated that his Government were considering a scheme whereby only graded ghee could be exported free of duty.

He also said that he proposed to start an egg grading station as an experiment but before he could do so, it seemed desirable to have separate specifications for guinea fowl eggs which formed about 50 per cent. of the total production during the months of March, April and May near about Bassi Pathanan, a town from where about six to seven lakhs of eggs are exported annually. It was agreed that the question should be investigated.

Mr. Fekdar said he intended opening a grading station for *pears* and would need the help of the Centre in drawing up grade specifications. He also said that, as Director of Agriculture, he was grading the State Poultry Farm *eggs*.

He complained of railway freights being unfavourable for Kashmir apples which suffered from competition from Japanese and other foreign apples so that their sales in port areas had fallen off considerably. He was asked to submit figures showing the extent of the traffic in Kashmir apples to such points now and in previous years.

Dr. Patel pointed out that if the grading station for *mangoes* proposed for Ratnagiri were shifted to Amalner, it could not only serve Bombay mangoes, but also mangoes from Baroda. He also drew attention to the desirability of defining the conditions under which a State could grade ghee in its own Laboratory. The Agricultural Marketing Adviser thought that the matter presented certain legal difficulties which could be overcome if the State adopted the Agricultural Produce (Grading and Marking) Act.

The course of the discussion indicated that the general feeling in regard to the question of charging for labels etc., now supplied free by Centre was that the proposal was perhaps premature. It would, however, continue to receive the careful consideration of Senior Marketing Officers in provinces and States.

The Chairman next stated the position in regard to the question of legislation on weights and measures and said that under the Government of India Act the establishment of standards of weights (but not of measures) was a central subject. Weights and measures in general formed a provincial subject. The Imperial Council of Agricultural Research had addressed the provinces in regard to the standards of weights. In addition, three provinces were proposing legislation on this point. The question was now under the consideration of the Commerce Department.

At this stage *Mr. Livingstone* took the chair in place of *Sir Bryce Burt* to whom the conference passed a cordial vote of thanks for his kindness in presiding during the opening stages.

tem 3 (d) of the Agenda

Mr. Livingstone explained that the proposal of the last Conference in re-ard to the regulation of market charges had borne fruit and provinces had ow started legislating in this direction He wanted to know what the different rovinces were actually doing and what could be done by the Marketing staff o expedite the work

A general discussion followed It was agreed that it would be desirable o have a model bill for the guidance of the provincial staff Mr Malik, vho said he had studied all the existing bills carefully, offered to furnish a lraft outline of a model bill in a few weeks time, which after scrutiny by Cen-ral Staff would be forwarded to other provincial marketing officers for their omments On receipt of these comments the final outline would be drawn p at the centre by 15th June 1938 if possible The Agricultural Marketing [illegible]

ions.

Item 3 (e) of Agenda

Mr. Livingstone then invited the opinion of the officers as to what was ossible in regard to demonstrations etc. and whether the work should be done y the centre or the provinces or by the two together

It was agreed that if the centre could provide the material, *e g*, charts, ictures, maps, films, slides, etc., the provincial staff could carry on the actual lemonstration work. Agricultural Marketing Adviser would consider the ossibility of making films on a cine camera of 16 m m. size.

At this stage the question of appointing a sub-committee to consider the uestion of containers and transport facilities for perishables (particularly ruits) was raised and the following sub-committee was formed Messrs 'avaraya (Chairman), Malik, Handique, Fotedar, Sapra, Sarkar, Nair and Sidwai The terms of reference of the committee were —

(i) to suggest the methods of improving the containers of perishable roducts ; and

(ii) to suggest lines of improvement in the transport of perishables.

It was also announced that the sub-committee would meet on Wednesday norning at 11 and its report would be considered on Thursday at 10-30 A M

'tem 3 (f) of Agenda

Mr. Livingstone said that the item was largely for information He said t was proposed to add to the Act, edible oils, fruit products, *ata*, wheat, rice ind cotton of distinct botanical varieties and the interests concerned were eing consulted before the actual additions took place

Item 3 (c) of Agenda

At this stage *Mr Charles Barns*, News Editor of the All India Radio oined the meeting and the question of the development of Market News ser-ice was taken up Messrs Thomson and Samuel sketched a position of the resent arrangements for broadcasting prices, stocks etc. of cereals and oil-eeds and of the future plans for the broadcasting of she-buffaloes prices.

The provincial and State Marketing officers also stated the position in respect of their areas. A general discussion followed in which *Mr. Barns* also participated. As a result the following points emerged and were agreed to :—

(*i*) News service was of 2 special kinds, *viz.*, (*a*) one for the markets and (*b*) for the rural areas, *i.e.*, for the producers themselves.

(*ii*) While the usefulness of the radio was generally acknowledged, it was felt that paucity of funds would stand in the way of the sets being widely adopted, specially for the second type of service.

(*iii*) People in different places were interested in price quotations of different commodities, and broadcasting from the several All-India Radio stations should be arranged to suit their interest.

(*iv*) The diversity of weights and measures was a limiting factor in the adoption of an uniform marketing news service, and quotations on standard basis alone, for instance, 80 tolas to a seer and 40 seers to a maund, were possible.

(*v*) Wherever radio sets are not available the marketing staff would continue to exert its influence in disseminating market news through the usual agencies, *e.g.*, bulletins, demonstrators, post cards, etc.

(*vi*) Provincial Officers would be well advised to get into touch with the local officers (Station Directors) of the All-India Radio and devise schemes in consultation with them.

The conference resumed its sitting at 10-30 A.M. on the 14th April, 1938, with *Mr. Livingstone* in the chair.

Mr. Livingstone proposed that item 4 of the Agenda "Arrangements for Railway Statistics" may be taken up along with the Sub-Committee report (*see* pages 12—14) regarding fruit packing and transport. The Sub-Committee report was taken up first.

Mr. Javaraya outlined the details of the discussion that took place in the Sub-Committee.

Mr. Livingstone asked whether it would not be advisable to try and assemble, in the form of a report, all the information regarding containers that had already been obtained from the provinces and States, particularly so when different provinces dealing with different commodities might require different types of containers. He said that it might then be decided whether the experiments were to be conducted on square bamboo containers or any other type of containers for which a certain amount of information already existed.

Mr. Kartar Singh pointed out that sufficient information was available in the various provincial reports submitted to the Centre.

The House accepted *Mr. Livingstone's* suggestion that a summarised report in the shape of a descriptive booklet may be made very quickly from the provincial reports regarding containers, returnable, non-returnable, their sizes, capacity, etc.

Marketing Officers after reading that booklet would put up suggestions as to what particular types of containers they need and also give any suggestions for improvement. Necessary experiments might then be made in different localities.

The Conference then discussed the recommendations of the sub-committee for a general reduction in the freight charges and for transport facilities for all perishable goods in wooden vans with proper ventilation and adjustable shelves.

Mr. Livingstone pointed out that that was a matter which the Provincial Marketing Staff could take up direct with the different railway administrations. He understood that the railways were quite prepared to reduce the freight charges whenever they could be assured that a reduction in freight would increase traffic. After a general discussion it was agreed that in any case railways should be asked to provide improved service for the existing rates, in the way of collection and delivery of perishable products by railways themselves and by providing wooden or insulated vans for their transport. It was further agreed that the Provincial Marketing Officers would furnish to the Agricultural Marketing Adviser facts and figures showing how improved service would help the trade and thereafter the Agricultural Marketing Adviser would circulate a draft letter for observations by the Provincial Marketing Officers. After receipt of comments, if any, the letter would be sent by the Agricultural Marketing Adviser to the authorities concerned.

Mr. Javaraya then opened the discussion on the last point, namely, that the marketing officers of provinces should be represented on Road Boards, Railway Advisory Committees and Economic Enquiry Committees

[illegible]

Item No. 4 of the Agenda.

[illegible] communic[illegible] data would [illegible] 100 in the case of N. W. R.

[illegible] the railway were not [illegible] was decided that they [illegible] only The Provincial [illegible] ommercial departments [illegible] ld help the other

Item No. 5 of the Agenda

Mr. Livingstone desired to know how far the activities of the marketing staff and co-operative department were co-ordinated

There was a general feeling among Provincial Marketing Officers that the co-operative department was not pulling together with the marketing staff. In the course of discussion it was found that in many provinces the marketing staff found difficulties in co-ordinating its activities with the [illegible] ere was a Marketing [illegible] herefore agreed that, [illegible] ion between the Co- [illegible] le that a Marketing

Board be established in provinces where one does not exist at present and that the Registrar of Co-operative Societies and the Director of Agriculture (or Marketing Officer) should be on the Board.

Mr. Mohiuddin desired that the Central staff should draft model bye-laws for ordinary trade associations and for "futures" associations and have them circulated to the provincial and State staff so that they could modify them and adopt for use.

Mr. Livingstone suggested that the bye-laws of the East India Cotton Association or the draft notes of the sugar terminal markets could be adapted and these bye-laws would be practically common to almost any kind of association. He also referred to the Federation's bye-laws which had been drafted and circulated to all trade associations and said that when these bye-laws were approved by the trade associations, they would be useful to almost any kind of association whether dealing in ready or "features" transactions. The draft would be found in the Proceedings of the recent Grain Conference.

Mr. Livingstone's suggestion that the next Marketing Officers' Conference might be held sometime in September or October next year (1939) was accepted.

With a vote of thanks to the Chair the Conference terminated at 2 P. M.

LIST OF OFFICERS WHO ATTENDED THE FOURTH JOINT CONFERENCE OF THE CENTRAL MARKETING STAFF AND SENIOR MARKETING OFFICERS IN PROVINCES AND STATES HELD IN DELHI, 11TH TO 14TH APRIL, 1938.

Sir Bryce C. Burt, C I.E., M.B.E., I.A S. (Chairman).

Mr. A. M. Livingstone, Agricultural Marketing Adviser.

Dr. W Burns, D Sc., I.A S, Agricultural Expert, I.C.A.R.

Dr. T. E. Gregory, D.Sc., Economic Advisor to the Government of India

Mr. K. G Raju, Madras

Dr. M. B. Ghatge, Bombay.

Mr. A. R Malik, Bengal

Mr. J. A. Manawwar, United Provinces.

Sardar Kartar Singh, Punjab.

Mr. B. N. Sarkar, Bihar and Orissa.

Mr. P. D. Nair, Central Provinces.

Mr. Hpu, Burma.

Mr. L K. Handique, Assam.

Mr. Ghulam Qadir } North West Frontier Province
Mr. D. M. Sapra }

Dr. L. M. Hira, Sind.

Mr. H. R. Kidwai, Baluchistan

Sardar Sahib Mehtab Singh, Delhi.

Dr. M. D Patel, Baroda.

Mr. A. Mohiuddin, Hyderabad

Mr. M R Fotedar, Kashmir

Mr. R. Aiyengar, Travancore

Mr. Harchand Singh, Patiala

Mr A. S Low, Senior Marketing Officer, Jute Committee.

Mr. N. K. Sarkar, (Indian Lac Cess Committee)

Mr. M. Gopala Menon, (Indian Coffee Cess Committee).

Mr. R. C. Sinha, (Jodhpur).

Central Marketing Staff

Mr. C B Samuel }
Mr. A. M Thomson } Senior Marketing Officers.
Mr. H. C. Javaraya }

Mr. B P. Bhargava }
Dr. T. G. Shirname } Marketing Officers.
Mr D N. Khurody }

Mr. S. K. Bedekar
Mr. E. M. Bee.
Mr. S. C. Chakravarty
Mr. K. C. Chetty
Mr. Shashikant K. Desai
Mr. Y. T. Desai
Mr. K. Gopalan
Mr. Fazal Haq
Mr. Nurul Islam
Mr. H. Khan
Dr. T. G. Menon
Mr. F. A. Shah

} Assistant Marketing Officers.

Sugar Marketing Staff (Temporary).

Mr. T. Prasad, Marketing Officer.

Mr. H. S. Lodi
Mr. K. P. Jain

} Assistant Marketing Officers.

Mr. J. N. Ugra, Officer on Special Duty.

Mr. P. L. Tandon, Supervisor, Experimental Grading and Packing Stations.

In attendance.

Mr. A. G. Sherlekar, Manager, Indore Premier Co-operative Bank, Indore.

Report of the Sub-Committee appointed to consider the question of containers and transport facilities for perishables.

The following members were present :—

1. Mr. H. C. Javaraya, Senior Marketing Officer, Fruits and Special Crops (Central) —*Chairman*.
2. Mr. M. R. Fotedar, Director of Agriculture and Member, Marketing Board, Kashmir.
3. Mr. L. K. Handique, Senior Marketing Officer, Assam.
4. Mr. H. R. Kidwai, Assistant Marketing Officer, Baluchistan.
5. Mr. A. R. Malik, Senior Marketing Officer, Bengal.
6. Mr. D. M. Sapra, Marketing Officer, N.-W. F. P.
7. Mr. B. N. Sarkar, Senior Marketing Officer, Bihar.

Mr. Nair, Provincial Marketing Officer, Central Provinces was unable to attend the meeting. Mr. Hukmat Khan, Assistant Marketing Officer, Fruits (Central) was also present.

The Chairman in opening the meeting explained the object with which the Sub-Committee had been appointed and said that he did not want to anticipate the discussions. He invited the members to speak on the subject of the packing and transport of fruits, referring particularly to concrete instances and personal experience.

Mr. Malik said that he would have conducted some experiments
tainers for Sikkim mandarins during the last season but for the fa
the work of grading mandarins at Rangpo was started rather late and
no time to attend to it. He said that the size of the containers used at R
was 24" × 18" × 12" and the number of fruits in each container varied
450 to 500, the average weight being 1 maund 15 seers. Mr. Malik sugg
that he wanted to reduce the size of the containers to 12" × 9" × 9".

The Chairman explained that while taking into consideration the q
tion of improved containers it was necessary to keep in view the material av
able for the manufacture of containers in each locality and the cost of
contain-rs.

Mr. Sarkar said that the question of the manufacture of standard con
tainers was not a new one as it had been tackled by Sir Alfred Howard som
twenty years back but without any definite results. He was not in favour o
expensive containers because he was of the opinion that if the containers were
costly much of the trade would be developed by people who would pack
fruits in cheap packing cases. He related his experience of transporting
mangoes as an experimental measure from Bihar to Simla. The relative
merits of the containers now in use for packing different kinds of fruits were
discussed in detail.

After a discussion on the shapes, sizes and material of the containers
manufactured in the various provinces and States, the Chairman requested
the members to give their individual opinions as to what they proposed to do
to improve the containers used in their respective places for particular fruits

Mr. Handique said that as far as Assam was concerned he would try to
conduct experiments in the manufacture of wooden cases for mandarins and
he felt sure that he would be successful as a lot of suitable and cheap wood was
available there. *Mr. Malik* said that he would conduct experiments with re-
gard to the size of the containers at Rangpo. He also said that he would
consult the Government Timber Depot.

Mr. Kidwai said that as far as his province was concerned the question
f containers was very difficult to tackle as there were no trees which yielded
aterial for the manufacture of containers The only plant available for use
as Tamarix but his experience showed that the cost of a basket of Tama.
r manufactured in Baluchistan amounted to 12 annas which was indeed too
h.

The Chairman suggested that Mr. Kidwai should concentrate on the pack-
f finer varieties of grapes in cartons which could be transported in crates
eaches it was suggested that cardboard boxes about which information
lready been supplied to him might be tried.

r. Sapra said that as far as grapes from Sheikh Mohommadi were con-
he wanted to conduct some experiments on containers

e Chairman said that experiments were being conducted in the Tarnab
nd that Mr. Sapra might also follow the same lines as suggested in the
Baluchistan grapes

Foledar said that he was quite satisfied with the containers used for
Kashmir but he did want to make some changes in the containers
oft fruits such as cherries, peaches and plums.

The following resolution for submission to the Marketing Conference was then passed :

"The sub-Committee recommends that a sum of Rs. 2,000 may be allotted for conducting experiments on containers at different stations and a grant to the extent of Rs. 200 be given to each station, on the condition that if any further funds were required, the Marketing Officers will approach the local Governments concerned for help."

(2) The question of railway freight was then taken up for discussion.

Mr. Fotedar said that as far as the freight on apples was concerned he was able to get some reduction from the North Western Railway and East Indian Railway but it was due to the fact that there was a lot of rail/road competition.

Mr. Handique was of the opinion that all the railways should be addressed on the subject of reduction in railway freights, giving them facts and figures about the traffic of fruits from one place to another.

After a full discussion on the subject the following resolution was passed :

"Considering that the freight charges in the transport of fruits which were fixed years ago are very heavy and the prices of fruits have come down during recent years, the Sub-Committee recommends that the Agricultural Marketing Adviser should approach the Railway Board to consider the question of general reduction in the freight charges on all fresh fruits in India after receiving the details of particular cases of hardship from the Marketing officers in the provinces and States."

(3) *The Chairman* then invited discussion on the inconveniences felt in transporting fruits in unventilated wagons.

Mr. Malik suggested that the railway authorities should be requested to provide wooden wagons provided with adequate ventilation for the transport of fruits.

The Sub-Committee after considering at length the question of damage caused to fruits by transporting them in unsuitable vans passed the following resolution :—

"As most of the vans used at present particularly for wagon load traffic are of steel which causes a great deal of damage to fruit, the Sub-Committee recommends that the railways should be requested to provide as far as possible wooden vans (for the transport of fruits) with proper ventilation and adjustable shelves."

(4) Messrs. Malik and Handique explained the difficulties experienced by them in representing the cases of merchants etc., to the railway authorities in connection with the traffic of agricultural commodities.

The Sub-Committee then passed the following resolution :

"Since the Marketing Officers had experienced considerable difficulty in putting up matters concerning transport and freight charges on agricultural commodities to the Railway authorities, this Sub-committee recommends that the attention of the provincial Governments be invited to the recommendation made by the Royal Commission on Agriculture in regard to the Provincial Marketing Officers being a member of the local Advisory Committees constituted for the railway system in his province and also of the provincial Road Board where one has been formed.

The Committee adjourned at 1-00 P.M.

APPENDICES.

CIRCULATED PAPER No. 1.

Item 1 of the agenda—General progress report.

(Note by Agricultural Marketing Adviser.)

A copy of the report of the Agricultural Marketing Adviser and summarised reports of the Senior Marketing Officers in provinces and certain States, for the year ending 31st December 1937, is enclosed (printed separately). The following is a brief summary of the work done after 31st December 1937:—

(a) *Marketing Surveys.*—Up to date about 366 local survey reports on various commodities have been received at the Headquarters and the compilation work is in progress. The first proof complete with diagrams, photos, etc., of all India survey report on linseed has been returned to the press and the report will issue shortly. Parts of the all India reports on grapes, tobacco and eggs have also been sent to the press and the remaining parts are being prepared. Compilation work on and drafting of the all India reports in regard to rice, groundnuts, cattle and hides and skins are also in hand. The abridged editions in Urdu, Hindi and English of the All India wheat report were issued.

Arrangements have been made for the analysis of sugar samples at the Imperial Institute of Sugar Technology, Cawnpore.

The scheme for cotton marketing survey has been referred, by the Indian Central Cotton Committee, to commercial bodies for their opinion. Accordingly no survey work on this commodity needs to be taken up by the provincial and State Marketing Staffs meantime.

(b) *Development work.*—Since 1st January 1938, grading and marking work has been started at 6 stations (*viz.*, for eggs at Bombay, Quilon, Rampore and Bareilly, for ghee at Cawnpore and for *ata* at Lahore). Four grading stations (for eggs at Calcutta and Chenganoor and for oranges at Chhatak and Rangpo) have been closed down during the above period. The total value of the produce put under 'Agmark' now comes to about Rs. 13 Lakhs.

CIRCULATED PAPER No. 2

Item 2 of the agenda—Programme of future marketing surveys

(Note by Agricultural Marketing Adviser).

Various suggestions have been received from time to time for including certain commodities in the programme of marketing surveys. The statement below shows the dates by which local survey reports are expected to be furnished by the Provincial/State Marketing Staffs and also the date by which the corresponding All India reports are to be made ready. It will be seen therefrom that there is hardly any scope for taking any more new survey work, at any rate before the end of 1939. It has also to be borne in mind that now a good deal of the time of the Marketing Staffs will have to be devoted to development work in respect of commodities already surveyed. The question is for the consideration of the conference.

Programme of Marketing survey reports

Name of commodity.	Latest date on which local reports are required	Probable date of completion of All India Report
Cereals, Oilseeds, Sugar and Lac.		
Rice	May 1938	July 1938
Groundnuts	August 1938	September 1938.
Sugar (a) Preliminary	September 1938	November 1938
Coconuts	December 1938	December 1938.
Mustard, rapeseed and toria	March 1939	April 1939
Gram	May 1939	June 1939
Sugar (b) Final	July 1939.	August 1939.
Barley	June 1939	September 1939
Lac	September 1939	October 1939
Maize		December 1939.

Programme of Marketing survey reports.—contd.

Name of commodity.	Latest date on which local reports are required.	Probable date of completion of All-India Report.
Special subjects.		
Co-operative Marketing	..	August 1938.
Markets and Fairs	..	September 1938.
Fruits and Vegetables.		
Potatoe	..	February 1939.
Bananas	..	February 1939.
Oranges, etc.	August 1938	April 1939.
Apples and other pome fruits	December 1938	September 1939.
Mango	December 1938	December 1939.
(Pineapple, stone fruits and cashewnuts outstanding at end of December 1939.)		
Animal Husbandry and dairy products.		
Cattle	..	August 1938.
Milk	..	October 1938.
Hides and Skins	..	January 1939.
Sheep and Goats	October 1938	March 1939.
Ghee and Butter	December 1938	June 1939.
Wool and Hair	March 1939	September 1939.
Fish	June 1939	December 1939.

CIRCULATED PAPER NO. 3

Item 3 of the agenda—Future programme of development and experimental work.

(*Note by Agricultural Marketing Adviser.*)

(*a*) *Standardisation of contract terms.*—At a recent informal conference with the representatives of the interests concerned standard contract terms for wheat and linseed were agreed upon. It was also agreed that all 'futures' and delivery contracts made henceforward in respect of May 1939 and subsequent deliveries should conform to the All India Standard Contracts for wheat and linseed. As regards groundnuts, certain revised proposals were placed before the conference and it was decided to obtain the views of other associations concerned. It is now proposed to hold another conference with a view to rounding off the preliminaries and bringing about the new contract into being.

(*b*) *Experimental grading and packing stations.*—After taking into consideration the proposals made by the Provincial/State Marketing Staffs, Central Staff is prepared to give a limited amount of financial assistance for running experimental grading and packing stations for the commodities and at places mentioned in the attached statement. (See pages 17 & 18.)

(*c*) *Development of Market News service.*—Every week the prices, stocks and movements of wheat, linseed and rice are broadcast from the Delhi station. The daily closing rates at Hapur market in respect of wheat, barley, gram, peas and *arhar* are also being broadcast from Delhi. Arrangements for amplifying the service at present broadcasted from Delhi by the inclusion of other commodities (*e.g.*, Buffaloes etc.) and introducing a similar service from Provincial centres are for the consideration of the Conference.

(*d*) *Regulated Markets.*—The recommendations of the last Marketing Officers' Conference in regard to regulation (and registration) of markets and market charges as also the licensing of market operators were duly communicated to the Provincial and State Governments for their consideration and necessary action. As a result, the Mysore Government are considering a draft bill for establishing regulated markets for agricultural produce in the State. It is also understood that the merchants at Davangere and Chitaldrug have already taken up the question of starting regulated markets in their respective areas on a voluntary basis even before the proposed bill becomes law. The Bengal Government also propose to start two regulated markets for jute during the current financial year and a sum of Rs. 25,000 has, it is understood, been earmarked for this purpose. Similar proposals have been put up and/or are being considered in almost all the provinces but it is for the Conference to consider what further steps could be taken to ensure a rapid progress.

(ii) *New rules and revision of the existing rules.*—The addition of certain commodi-

rules.

In the light of the experience gained certain modifications to the existing rules have been found to be necessary. These are now under consideration and will be published along with the new rules.

the various items of work to the minimum

(ii) Certain provinces and States appear to have taken certain preliminary measures for the standardisation of Weights and Measures. It would be desirable that some indication might be given of the earliest possible date when such reforms would be initiated.

FUTURE PROGRAMME OF DEVELOPMENT AND EXPERIMENTAL WORK (GRADING AND PACKING STATIONS)

Fruits.

1	*Mandarin	Nagpur, C. P.	2 months.
2	*Oranges (Mosambi)	Rahuri, (Bombay)	3 weeks.
3	Grapes	Kodaikanal (Madras)	3 months.
4	Grapes	Quetta (Baluchistan)	4 ,,
5	Orange (Malta)	Montgomery (Punjab)	3 ,,
6	Orange (Satgudi)	Cuddapah (Madras)	6 ,,
7	Mandarin	Gonikappal (Coorg)	3 ,,
8	Apples (Rome)	Bangalore (Mysore)	3 ,,
9	Mangoes	Malluabad, U. P.	3 ,,
10	Mangoes	Murshidabad (Bengal)	4 ,,
11	Mangoes	Ratnagiri, (Bombay)	3 ,,
12	Pears (Hard)	Coonoor (Madras)	3 ,,
13	Lime	Tanjore (Madras)	2½ ,,

* Already in operation.

		Tobacco.	
14	*Indian Tobacco Association Ltd.	(Guntur) . . .	Full year.
15	Tobacco (*Desi*) . . .	Muzaffarpore (Bihar) .	3 months.
16	Tobacco (*Jati*) . . .	Rangpur (Bengal) or Cooch Bihar . .	3 ,,
17	Tobacco (Cigar) . . .	Trichinopoly (Madras) .	3 ,,
		Hides.	
18	*Hides	Delhi	About 8 months.
19	*Hides	Agra	,, 8 ,,
20	*Hides	Tangra	,, 4 ,,
21	*Hides	Garden Reach . . .	,, 9 ,,
22	Peripatetic flaying demonstrations	U. P.	Full year.
23	Flaying machines . .	U. P.	..
		Eggs.	
24	*Eggs	Quilon (Travancore) .	10 months.
25	Eggs	Lucknow, (U. P.) .	3 ,,
26	*Eggs	Bareilly, (U. P.) . .	3 ,,
27	*Eggs	Bombay . . .	3 ,,
28	Experiments on containers .	Peshawar . . .	....
29	Hand grading machines	....	....
		Ghee.	
30	*Ghee	The Central Ghee Control Laboratory, Cawnpore .	Full year.
		Cereals and oilseed	
31	Ata	*Lahore (Punjab) . .	4 months.
32	Rice (Punjab Basmati). .	Sialkot, Gujranwala and Sheikhupura. . .	**
33	Rice (Dehra Dun Basmati) .	Dehra Dun and Saharanpur	**
34	Rice (Patnai) . . .	24-Parganas district, Bengal . . .	**
35	Rice (Sirumani) . . .	Tanjore District (Madras)	**
36	Grounduts (Hand picked) .	Kholapur, (Bombay) .	**

* Already in operation.

** The actual grading is proposed to be done by the trade. Employment of Recorders may, however, be necessary.

Circulated Paper No. 4.

Item 3 of agenda—Future programme of development and experimental work.

Note by Mr. A. R. Malik, Senior Marketing Officer, Bengal.

(1) *Grading Stations.*—At the present moment two grading stations are working in Bengal, both in respect of hides, *i.e.*, at Tangara and Garden Reach. Unfortunately the system of sale of hides prevalent at both these places that is before slaughter, gives no index to any advantage that may be achieved out of grading work. Again, it is next to impossible to alter the practice and introduce the sale after slaughter.

Proposals have, however, been put forward for the starting of 3 egg-grading stations in the producing areas at a cost of Rs. 6,000. This amount has been included in the next year's budget and if sanctioned, these stations will be started in, or as soon as possible after, April next.

Two parties are keen in putting up grading stations for ghee and in one case at least arrangements are almost complete for the sale of "Agmark" ghee. But the local Government will not provide any funds for it.

(2) *Market news service.*—At present there is no arrangement for this. It is proposed that when Regulated markets for jute are started, a Market News Service will simultaneously be put into operation by which Calcutta prices will be telegraphed to the markets in question and hung up on a notice board. Besides, prices will be broadcasted from Calcutta and received at the above markets through a special Receiving Set. All interested may listen in and these prices would also be notified by loud-speakers.

Besides the Government of Be...

(3) *Regulated markets*.—It is proposed to start one or two regulated Mark...

such as paddy, tobacco, mustard etc

(4) *Agmark products*.—Eggs and ghee are possibly the only commodities so far that

(5) *Exhibition work*.—The demonstration of grading and Agmark products will form an integral part of the work of this Section. At a recent exhibition the grading of eggs was demonstrated besides a hand cotton ginning mill

The publicity Section of the Public Health Department runs a motor lorry Several

(6) *Miscellaneous*.—Close co-operation with the Co-operative Department has been kept in view in the past The Government have recently appointed an officer as rural Development Commissioner who is expected to join shortly This Section will keep in touch with him and co-ordinate with him in general development work

Attention will be concentrated on the drafting of a suitable Regulated Markets Act during this year.

Assistance of the Central staff will be required in connection with the establishment of a tobacco grading station

A closer co-operation with the marketing staff of the Indian Central Jute Committee will also be maintained in connection with the control of the Regulated Jute Markets

Experiments will be made during the next orange season, with packages which may be more handy and suitable for marketing purposes

Note by Mr G K Raju, Provincial Marketing Officer, Madras

I. *Establishment of Grading Stations*.—During the year it is proposed to have grading

Governments.

II. *Market News Service.*—Weekly wholesale prices of all important commodities in the chief markets of the Presidency are being published in the Fort St. George Gazette and important dailies. There are 35 commodities in all for which prices by varieties are published and the list includes paddy and rice, tobacco, groundnuts, other food grains, chillies, turmeric, hides and skins, jaggery etc. For the information of the public these weekly prices are being published simultaneously in the offices of the Tahsildars, Sub-Registrars, Agricultural Demonstrators etc., in the mofussil centres. Besides, weekly wholesale prices at Madras city are being arranged for such commodities as rice, plantains, jaggery, oranges, limes, etc., through the Provincial Marketing Society, and these are published in all important dailies. This is not enough. The prices of commodities in inter-provincial and foreign trade ought to be broadcasted. It is useful to have a daily service in regard to the state of foreign markets and the markets in India, and the services of the Radio may be suitably arranged for such purpose. We require for example, daily prices of potatoes and groundnuts at Bombay, linseed at Calcutta, copra and coconut oil in Colombo, rice in Burma, plantains in North India etc. These commodities can be fixed at the Conference for each province, and arrangements made for broadcast after collection at Delhi.

III. *Regulated Markets.*—A regulated market for cotton is functioning at Tiruppur (Coimbatore district). I have suggested the extension of the Commercial Crops Markets Act to all important commodities and markets in the Presidency. For this purpose the Act has to be suitably amended.

So far as commodity markets in large cities are concerned, and where the Commercial Crops Markets Act cannot be extended, I have suggested to the local Government some form of licensing or registration of agents in order to regulate transactions and provide fair conditions to sellers. Considering the importance of this matter in inter-provincial trade it requires immediate attention.

During the year the following crops and markets will be tried.

Tobacco	Guntur.
Groundnut	Cuddalore.
Rice	Bezwada.

A regulated market for cattle sales at Tiruvottiyur near Madras will also receive attention. Sale of cattle in open auction and the assembly of cattle in the market under definite groups like bull calves, bulls, cows, etc., will be tried.

IV. *Development of trade in "Agmark" products.*—The export of Virginia tobacco in 'Agmark' grade to England has been commenced. About 350 bales were sent last year. Eggs and ghee also will be put on the market during the year under 'Agmark'.

In order to develop the trade in 'Agmark' products in the beginning, some encouragement from Government Institutions to such graded products will be necessary. As for example Government Hospitals and Government College Hostels, Military Camps, etc., may insist on getting eggs, ghee etc., with 'Agmark' seal. Similar encouragement is already being given to Government Soap Works etc.

V. *Exhibitions etc.*—The working of the egg grading machine was recently demonstrated by the Marketing Section at the Ongole Cattle Show and Agricultural Exhibition. The following important weekly shandies in the Presidency are considered suitable for such demonstration and propaganda:

Pollachi	(Coimbatore district)
Nainamalai	(Salem District)
Theni	(Madura District)
Tuni	(East Godavari District)

Intensive propaganda can begin only when definite improvements as grading, packing, etc., have been evolved. Want of adequate staff is another handicap for progress of work in this direction. Bulletins, pamphlets, charts, pictures, etc., of improved methods of marketing may be supplied by the Agricultural Marketing Adviser.

VI. *Miscellaneous.*—

(i) *Liaison with Co-operative Department.*—Jointly with the Co-operative Department the following works have already been undertaken and are in full swing.

A provincial Marketing Society for the sale of the produce of the Co-operative Sale Societies in the Presidency is working in the Madras city.

A Fruit Growers' Association has been working this season at Koduru (Cuddapah district). It sold about 2,800 railway maunds of oranges of value of Rs 16,000 during the first six months of its working.

A similar Fruit Grower's Society has been formed at Puttur (Chittoor district) for the marketing of oranges. The Society was registered at the fag end of the orange season.

A Grape Growers' Co-operative Society has been started in Madura district, and export of Kodaikanal grapes to places in the Madras Presidency as well as North India is in full swing. Over 500 maunds of grapes have been marketed in the first month of its working.

A Mango Growers' Association has been organised at Vizianagram for direct export to North India in the coming season and another Society for limes at Palacole (East Godavari district).

A potato Growers Society in Nilgiris and another in pine apples at Malabar are also functioning.

(ii) *Improved Storage and Preservation.*—Some preliminary work on the canning of mangoes and pine-apples has been done in this presidency.

Technique of cold storage methods for fruits like oranges and mangoes and for articles like fish, eggs, etc., require full investigation right from the producer to consumer. This Presidency has a large production of sour oranges and limes and it is worth while investigating the possibilities of a beverage industry.

(iii) *Containers.*—Rectangular packages of thin wood seem to be more suitable than baskets now in vogue for packing fruits. For eggs, compartmental packing made with [illegible]

(*Note by Mr. John A. Monsween, Provincial Marketing Officer, United Provinces.*)

Schemes for effecting improvements in the marketing of some of the important agricultural commodities were submitted to the provincial Government for approval and sanction of funds. These consist of the following :—

A. (i) *The scheme for the improvement of marketing of fruits.*—The scheme was prepared [illegible]

(ii) As a result of the marketing survey of wheat and the publication of the report on the marketing of wheat by the Government of India detailed proposals for implementing the recommendations contained therein were submitted to the Provincial Government through the Director of Agriculture, United Provinces. The chief proposals consisted of :—

(a) Standardisation of weights and measures.

(b) Registration of markets and regulation of market practices and charges. Two draft Acts one for the standardisation of weights and measures and the other for regulated markets on the lines of C. P., Hyderabad and elsewhere were prepared and submitted to the Government along with these proposals.

Reminders for giving effect to these proposals have been issued but no definite reply has been received so far. It is now proposed to move the Government to give effect to these proposals in selected areas in the province if it is not practicable to extend their application to the province as a whole.

(iii) At the request of the Director of Agriculture a three years' scheme for the improvement of marketing poultry and poultry products in the province and helping the educated unemployed trained in poultry under the SAPRU UNEMPLOYMENT SCHEME was submitted in the month of December 1937. The scheme has been partly accepted by the Government and has come into operation from March 1938. Its chief object is to enable these candidates to earn a living from egg collection as well as grading and marketing of poultry. To start with, four candidates have been established in the close proximity of Lucknow market and a poultry supervisor has been sanctioned to assist and supervise their work under the control and general supervision of the Provincial Marketing Officer. It is hoped that in course of time these four units will form important centres for collection, grading and marketing of eggs under the Agricultural Produce (Grading and Marking) Act, 1937.

(iv) A three years' scheme for the continuance of the hide grading station, Agra, and opening of another station at Bareilly has been submitted to the Government through the Director of Agriculture in March, 1938, at the request of the Agricultural Marketing Adviser to the Government of India and in co-operation with the improvement of Raw Hide Industry scheme of the Industries Department of United Provinces. The reply of the Government is awaited.

(v) In November 1937 a scheme for opening of experimental ghee testing and grading stations in the United Provinces at Bharthana, District Etawah; Etah, District Agra and Shikohabad, District Mainpuri for three years was submitted to the Government through the Director of Agriculture for approval and sanction of funds. The scheme was further revised at the suggestion of the Director of Agriculture and was prepared for one place alone, i.e. for Shikohabad, District Mainpuri, where the activities of the Co-operative Department for the improvement of the production of ghee are concentrated. The revised scheme was submitted to the Government in February, 1938, and their reply is awaited.

B. *Specific items in hand that are likely to need the marketing staff's help during the year* are:—

(i) Opening of cold storage chambers for fruits and other perishable commodities at Lucknow. Different firms and chambers of commerce have been addressed on the subject and the U. P. Fruit Development Board has also under consideration the question of starting this if Government aid is forthcoming.

(ii) At the request of the Inspector General of Prisons, U. P., regarding the supply of grain to the jails by the Marketing section proposals have been submitted to the Director of Agriculture for the sanction of necessary staff and funds for the supply of the requirements of the jail at Meerut as trial measure this year. This proposal has also been supported by the committee appointed by the Government in this connection.

(iii) Proposals for initiating the trade in wholemeal '*Atta*' from conditioned wheat have been discussed with the Senior Marketing Officer concerned of the central staff and it is expected that these would materialize if some hand conditioning machine is devised.

(iv) The marking and grading of Dehra Dun Basmati rice under the Agricultural Produce (Grading and Marking) Act is likely to be taken up shortly if definite standards regarding its quality, etc., can be fixed.

(v) Proposals for submitting a scheme for the construction of Farm Commerce Halls of the Muzaffarnagar type in the important *Mandis* of the United Provinces are under consideration.

(vi) As a result of the Ghee Adulteration Bill which has been introduced in the Legislative Assembly it is expected that the introduction of grades and standards for oils, fats, and hydrogenated vegetable products under the Agricultural Produce (Grading and Marking) Act, 1937 will be necessary in the near future:—

C. *Experimental aspects in which the assistance from the Central Marketing Staff will be necessary*:—

(i) Working out the grades and standards of indigenous tobacco—Nicotina Rustica and Nicotina Tabacum, and mangoes and other fruits grown in these provinces.

(ii) *Establishment of Grading stations.*—The following numbers of grading stations are likely to be established:

(a) *For Eggs*—Lucknow, Bareilly, Rampur, Etah, and Amroha, District Moradabad.

(b) *For Hides*—Bareilly, Rampur, and continuance of Hide Grading station at Agra.

(c) *For Fruits*—Mango grading stations at Amroha, Bareilly, and Lucknow. Apples at Ranikhet or Bhowali.

(d) *For cigarette tobacco*—Saharanpur.

(e) *For Ghee.*—At Khurja, Etawah, Shikohabad, Agra, Cawnpore, Aligarh, Lalitpur and Chandausi.

(f) *For Oils*—Agra, Aligarh and Cawnpore.

(g) *For Cereals.*—Rice at Dehra Dun, wheat trade in wholemeal '*Ata*' of conditioned wheat at four centres.

The estimate of cost [illegible]
Rs 3,943 per annum [illegible]
the cost will be much [illegible]
Rs 50 per month. G[illegible]

	Rs
Non-recurring	2,300
Recurring	5,740
Total per station per annum . .	8,040

[illegible]

A considerable amount of funds will be necessary for the speedy collection and dissemination of price data of all the important markets for various commodities. These markets consist of the following :—

Cawnpore, Agra, Lucknow, Jhansi, Benares, Gorakhpur, Fyzabad, Nainital, Meerut, Bareilly, Dehra Dun, Hathras, Hapur, Chandausi, Muzaffarnagar, Ghaziabad, Allahabad, Khurja, Etawah, Farrukhabad and Mirzapur

(iv) *Regulated markets.*—This has already been dealt with under item *A* (iv) (b)

[illegible]

E. *Exhibition work.*—The important fairs in the province where marketing demonstration might be given so as to reach the producer are as follows —

1 Allahabad Kumbh and Magh Mela.
2. Hardwar Kumbh Fair, District Dehra Dun
3 Garhmukteswar, District Meerut
4 Batesar, District Agra.
5. Makanpur, District Cawnpore
6. Dadri Fair, District Ballia
7. Dewa, District Barabanki.
8 Nauchandi, District Meerut.
9. Tulsipur, District Gonda
10 Aligarh, District Exhibition.
11 Etawah, District Exhibition
12 Khadi and Industrial Exhibition, Lucknow, Allahabad and Benares.

F. *Miscellaneous.*—It has been experienced that in formulating any scheme for the improvement of marketing the co-operation of the Co-operative Department is necessary and since the Marketing and Co-operative Departments are not under the control of the same officer co-ordination of the activities of both departments is difficult. In laying out the policy for the future development work it would be necessary to clearly define the portion of work to be assigned to the Marketing Department separately from the co-operative societies.

For effecting propaganda in the rural areas it seems desirable that the assistance of the rural development staff may be sought and free distribution of abridged survey reports in vernacular and other literature may be done through the school masters in villages.

Note by Dr. M. B. Ghatge, Provincial Marketing Officer, B. P. Poona.

1. *Establishment of grading stations.*—During the year 1937-38 only one grading station was established for Mosambi (oranges) at Rahuri in Ahmednagar district. Due to lack of funds grading stations for santra, grapes, eggs and mangoes could not be taken up. A year's working of a grading station at a place is not sufficient encouragement to the local producers or dealers. Therefore it should, in future, be the policy to run grading stations for at least three seasons. Once the producers and merchants of that locality begin demanding authorisation, competition would start, which would then help us in spreading the work of grading without shifting the grading work to another centre in the same locality.

Proposals sent to the local government to start grading centres are summarised below :—

Commodity.	No. of grading stations.	Place.
Grapes	2	Nasik District.
Mangoes	3	Ratnagiri and Surat Districts.
Mosambis	2	Ahmednagar and Poona Districts.
Santras	2	Khandesh and Poona Districts.
Eggs	3	Sholapur, Bombay and Poona Districts.
Hides and skins . . .	2	Ditto.

The probable expenditure for the scheme is put down at Rs. 11,000 a year.

The scheme does not include grading stations for "Bij" (Bold groundnut seed) which arose after the scheme was submitted. There seems to be good scope and grading is in fact being already done by merchants on the basis of so many grains per tola weight. At least one station either in Kolhapur or round about should be started and it will cost about Rs. 500.

It is not yet known whether the proposals are accepted by the local government. In case they are not accepted this year owing to financial stringency it is hoped the Central Government might sanction at least a sum of Rs. 3,000 + Rs. 500 (for "Bij" grading) to conduct one station for each of the abovementioned commodities.

II. *Market news.*—A proposal has been sent to the local government to sanction transfer of one of the Assistant Marketing Officer to Bombay, whose duties shall be the market news. No sooner than this appointment is sanctioned the work of developing market news and its dissemination would be taken up in hand. The amount asked for for this purpose is Rs. 3,000. The staff and funds being limited the work would not be commenced. The necessary plan as regards the number of places and the number of commodities is already made.

One of the difficulties that confronted me while preparing the plan was the quality of the commodity. The market news service would not be of any great use unless the qualities were fixed. This means grading of commodities and fixation of standards must precede development of market news. It is therefore proposed that standards for commodities should be fixed as early as possible.

The arrivals of each market is another difficulty. For arrivals by road, arrangements are being made with municipalities. The Municipalities are not quite willing to give us the arrivals as this will be additional work to their staff. They shall have to keep accounts for each commodity which they at present do not. But they are being persuaded. The arrivals by rail should be made available for each station by railway authorities.

Unless the Municipalities and Railways co-operate it would not be possible to know the movements of goods and the stocks on hand which are the main cause of price fluctuations.

III. *Regulated markets.*—In Bombay Presidency there is a Regulated Markets Act

A draft Bill making provision for other agricultural commodities including livestock has been sent to the Government for their consideration.

In the meantime the necessary field is being created for establishing regulated markets. Taking advantage of the existing Act, proposals for other cotton markets at Bawla (Ahmedabad), Jambusar, and Thasra (Broach), Surat (Surat), Malegaon (Nasik), Shirpur and Shahada (West Khandesh), Chalisgaon and Pachora (East Khandesh) Ahmednagar (Ahmednagar), Barsi or Pandharpur (Sholapur) and Gadag and Hubli (Dharwar), would be prepared during the course of this year and submitted to the authorities concerned.

Grading of cotton by some responsible and experienced person is necessary as an improvement in the existing cotton markets. This is an extensive item beyond the reach of the market committees. If the Central Government contributes by way of appointing a grader for one market for a season it will be a great assistance. This experiment will be an example to other markets which would indirectly give impetus to start new markets.

It is necessary therefore to make intensive propaganda with the consumers and create a demand for the Agmark products and to see that the Agmark produce reaches consumers and that it makes consumers conversant with the Agmark. This can very well be done by the merchants themselves who know how to create demand for their produce. But to convince the merchants the experiment in grading must be persisted in a locality for a period of not less than three years as suggested in my note on grading stations.

V. *Exhibition.*—In the year 1937-38 advantage was taken of two districts and one dist

If Exhibitions are to be effective they should be specially arranged for the purpose, when the visitors are interested in what is shown to them. I therefore propose that suitable sized museums in every division of the province with central one at the capital of the province be established and at specialised marketing centres arrangements may be made to demonstrate exhibits pertaining to commodities sold at those centres. The museums should supply the necessary models, charts, paintings, etc. The capital cost of the central museum to make a humble start would be about Rs. 4,000 with a running cost of Rs. 500 a year. This amount may be provided by the Centre to a province.

It is needless to give the specialised marketing centres at this stage since they vary with individual commodity. Their number would be very big taking all commodities into consideration. In this connection though a series of proposals have so far been put up to the local government [illegible] marketing, the most important activity in the business of agriculture wherever they are organised by some agency, private or otherwise.

The assistance required from the Central Marketing staff is by way of:

(a) the supply of the films of marketing operations [illegible] markets, regulated markets, etc. are very useful [illegible] stages right from the time a commodity leaves the producer till it reaches the consumer with all processings, conversions [illegible] would be extremely useful bringing out the producers that they are the important persons in the whole chain.

(b) the supply of posters in suitable languages attractive [illegible] the AGMARK labels, advantages of grading in getting better prices.

(c) supply of costly machines and apparatus which private concerns cannot think of buying till they are convinced of the utility and the technical assistance to work the machines.

Item 3 of Agenda.—Future programme of development and expansion of the work.

Note by S. Kartar Singh, Marketing Officer, Punjab.

(1) *Extension of Grading scheme*—

Cereals.

Experimental grading of wheat and rice has been undertaken for the last two years and has been very much appreciated by the consumers who are prepared to pay 10 to 15 per cent. higher prices for the [illegible] graded products.

Similarly a scheme for the grading of rice is under consideration and specifications for different grades of rice are being drawn up. In the meantime [illegible] wheat atta and rice in the Grading and Marking Act [illegible] ment.

Livestock products.

Detailed enquiries regarding the starting of grading of eggs have been completed for four centres and it is intended to start them very soon.

Ghee.—Certain [illegible] grading [illegible] at three centres will be started very soon. A scheme for Ghee Grading Centre is being worked up. Estimates of the cost will be furnished when the scheme matures.

Fruits.

Sangtra and malta oranges are the most important fruits in the Punjab. Details for the starting of grading [illegible] are being worked out in consultation with the Fruit Development Board and the Co-operative Department. It is hoped that by the time the next citrus crop is ready, work will be started.

In connection with the grading and standardisation of citrus fruit products, 15 samples of citrus fruit juices and 10 of orange marmalade have been collected and sent to the Fruit Specialist at Lyallpur for analysis. As soon as the results are available and specifications have been drawn up the work will be started.

(2) *Market News Service*—

It had been mentioned in the Marketing of Wheat Report that information about the stocks and carry-over was not available. An attempt was, therefore, made last year, through the courtesy of various Deputy Directors of Agriculture in the Punjab for getting this information from a number of markets. This will be continued during the next year also and along with the data collected from the wheat flour mills regarding the output of various mills, will be broadcast from Lahore station. Since December last prices of various commodities for Amritsar market have been broadcast daily and similar information from Okara is being arranged for broadcasting from Lahore. Occasional talks on various aspects of marketing of agricultural produce are also given.

It is felt that the illiterate cultivator requires this service much more than the trader and unless something is done to send the prices to the villages during the harvest season at least, much good will not come out of it. It is, therefore, proposed to disseminate the information about prices into the villages through the District Work Agricultural Assistants when the new scheme of concentration is taken up during the present year.

(3) *Regulated Markets*—

The establishment of regulated markets cannot be done unless Marketing Act comes into force. It is proposed to put such an Act before the Assembly in the next Session. The draft has already been prepared by the Marketing Section, Punjab and sent to the Government. The Marketing Act will include all the important commodities. To begin with it will be tried only in a few markets and will be further developed according to the experience gained.

(4) *Developing the trade in AGMARK products*—

The needful will be done when the number of grading stations has sufficiently increased. At present it is too early to say anything definitely about the work.

(5) *Exhibition Work*—

[illegible]

(6) *Miscellaneous*—

Everything that is possible with the staff and time at our disposal is being attempted.

The question of improved storage is being taken up seriously and the question of [illegible] drawn up.

General Note.

[illegible]

Note by Mr. B. N. Sarkar, Senior Marketing Officer, Bihar and Orissa

It has not yet been possible to take up any development work in these provinces. No grading station has yet been established in Bihar or in Orissa. Of the commodities for which grades have already been laid down it is possible to take up in Bihar the grading of ghee, eggs and tobacco. Attempts are however being made to take up work on the grading of tobacco, ghee, linseed and eggs as briefly described in the paragraphs below.

(i) *Tobacco.*—Not much cigarette tobacco is produced in Bihar and whatever is produced is purchased by the I. L. T. D. Company. Proposal is a foot to start some demonstration flue curing barns in the producing areas to produce cigarette tobacco. Efforts are also being made to start rough grading of sun cured tobacco for the Indian market.

(ii) *Ghee.*—Serious efforts were made to induce some merchants to take up the grading of ghee in accordance with the scheme laid down by the Agricul- [illegible]

(*iii*) *Linseed.*—As soon as merchants at Calcutta adopt the standard contract forms in respect of linseed we will work up to those standards in Bihar.

(*iv*) *Eggs.*—One hand egg grading machine has been purchased and grading is being demonstrated to egg merchants.

(*v*) *Gur.*—On account of the development of sugar Industry in Bihar the marketing arrangement of *gur* has been disorganised. A proposal was submitted for an Assistant Marketing Officer for development work, particularly for organising the marketing of *gur* and sanction is awaited.

(*vi*) *Regulated Markets.*—We have no regulated markets in these provinces. It is contemplated to start a regulated market for jute in Purnea after we have seen the working of the experimental regulated markets to be started in Bengal. The possibility of starting registered markets for lac is also being examined. Standardization of weights and measures should be expedited. A proposal was submitted informally to Government regarding registration and licensing of markets and merchants and detailed scheme is now being worked out.

(*vii*) *Exhibition.*—The marketing section takes part in exhibitions. The Sonepur fair is the largest fair in this province and it would be a good thing if marketing demonstrations could be given there.

(*Note by Mr. P. D. Nair, P. M. O., C. P., Nagpur.*)

(1) Preliminary investigations are being made with regard to the establishment of a Ghee Grading Station at Saugor. There is also a chance of starting another Ghee Grading Station at Raigarh. We are also considering the possibilities of establishing a Hide Grading Station at Jubbulpore.

No proposals have so far been submitted to the Local Government in this respect but, as soon as our investigations are complete, we hope to approach the Local Government for the establishment of these grading stations. We would require assistance from Central Marketing Staff for this work. The exact nature of assistance required will be communicated later on.

(2) We are investigating the possibilities of starting a Market News Service for oranges and grains in this Province.

(3) Proposals will be submitted to Government during this year with regard to the establishment of Regulated Markets for grains and also for oranges and live-stock.

(4) Any assistance required in developing the trade in "Agmark" products will be rendered by this section. It is hoped that the grading of oranges recently started in Nagpur will help to popularise trade in "Agmark" products in this province.

(5) The following six *Melas* (fairs) may be selected for exhibition work :—

Name of Place.	*District.*
Singaji	Khandwa.
Wun	Yeotmal.
Garhakota	Saugor.
Rajim	Raipur.
Burman	Hoshangabad.
Ramtek	Nagpur.

Stalls should be opened at these fairs by the Marketing Staff at which the present wasteful and inefficient methods of marketing will be demonstrated by means of pictures, diagrams and charts. This opportunity should also be taken to popularize "Agmark" products.

(6) Assistance will be given to the Co-operative Department whenever required for establishing Co-operative Marketing Societies. Cold Storage work on oranges will be continued. The distribution of marketing survey reports will be continued by the Marketing Staff.

(*Note by Mr. L. K. Handique, Senior Marketing Officer, Assam.*)

A summary of the proposals for development work submitted to the Government is given below.

I. *A proposal for a Government Agency in Calcutta for pineapples and oranges.*—This agency will be under full control of the Government to transact sale of Assam pineapples, oranges and any other crop. The growers in Assam will send their goods direct to this agency and in Calcutta the Agency will dispose them off by auction or by any

other means. A nominal amount will be charged from the growers for the services rendered. The scheme consists of hiring a small godown, one Manager, one clerk and a few menials. The whole scheme will cost the Government about Rs. 4,000 a year but it has been calculated that the amount realised for services will almost meet this.

If the scheme is a success then a bigger Agency will be established in the near future.

II. A proposal for establishing four Government godowns to store cultivators' paddy [illegible]

It is estimated that there will be a transaction of at least 50,000 maunds of paddy from each godown and even if the Government charge at the rate of annas two per rupee for their services the price obtained by cultivators for their paddy will be much higher than they obtain at present.

The whole scheme will cost the Government nearly a lakh of rupees but within a few years the whole amount will be realised and the scheme will be self supporting. Such centres will be established in other districts also afterwards.

Once the scheme operates it will also deal with mustard.

It is hoped that grading of these commodities will also be taken in hand at the same time with the assistance of the Central Marketing Staff.

III. *Establishment of godowns in Shillong for Khasi potatoes.*—The scheme is identical as No. II and the cost of such a scheme will be about Rs 10,000 a year. I have been working at present for detailed estimates.

As soon as any of these proposals start operating, the Marketing Staff in Assam will require assistance from the Central Marketing Staff.

[illegible]

(Note by Mr. R. Watson, Provincial Marketing Officer, Burma.)

1. *Establishment of grading stations.*

As most of the commodities which have been scheduled under the Grading and Marking Act, 1937, interest Burma primarily as an importing country cogent reasons for recommending the adoption of the Act by the Burma Government appear to be few. The Grading and Marking of hides and eggs is now, however, under consideration, and if it is decided to commence experimental work on these it will be an essential first step to propose that a Grading and Marking Act be passed.

As Burma exports hides it is conceivable that outside buyers, if able to buy on recognised marks, would be prepared to purchase to such an extent as to maintain the Burma price at a parity with other markets, whereas at present it is necessary that all purchases be made only after personal examination by purchasers or their authorised agents.

Grading and Marking of hens eggs is at present being undertaken by private enterprise such as the Pyinmana Fresh Egg Association and one or two poulterers. There is, however, a poor demand for fresh hens eggs and the present supply appears to be at least equal to the demand which is largely confined to the European element of the population.

For curries etc. considerable quantities of fresh duck eggs are utilised and it is possible that grading and marking of these might prove beneficial.

Such commodities as ghee, plums and other fruits except oranges, do not interest Burma except as importer. Oranges which are grown mostly in the Shan States, appear to offer a little scope for grading though more considerable improvements could be carried out in the matter of transport, extension in the season of supply and improvement in quality.

The question of grading rice and setting up a Board of Licensed Survey was considered by the Burma Rice Export Trade Enquiry Committee in 1936 and agreed to principle.

It has, however, been decided by Government to postpone further action on the Rice Trade Enquiry Committee report for the present, except in so far as the standardization of the paddy basket is concerned. Any scheme for the grading of rice would have to include such considerations as colour, moisture content, brokens, reds and impurities, and would presumably have to be on a variety basis.

Before adopting colour values a considerable amount of work would appear to be necessary as it is well known that colour varies not only from year to year, but within the year.

The setting up of an experimental grading centre would undoubtedly take time and would require considerable funds for its working.

The recommendations likely to be incorporated in the Report on the Marketing of Rice in India will no doubt give full consideration to this aspect of development work.

Commercial grade standards, adopted by the trade have been built up as a result of years of experience of trade requirements and appear to be fairly satisfactory. Something may be possible in the way of improving and tightening up these standards, but it is doubtful if much improvement can be effected without preliminary work on the lines suggested above.

II. *Market News Service in Burma.*

General.—A number of market reports are published in Burma in English or Vernacular. Some are daily reports while others are weekly ones. The Labour Commissioner also issues a statement of wholesale and retail prices for different commodities at Rangoon as a supplement of the weekly Burma Gazette. From January 1938 a new monthly publication called the Burma Trade Journal has been issued.

While these reports and statements contain much useful information regarding market prices, crop statistics, data regarding imports and exports, etc., it must be confessed that the dissemination of such knowledge is limited and few, if any, of these publications find their way into the villages.

Several reasons exist for this though the main ones are poverty, absence of cultivator's and Societies and comparatively poor postal arrangements.

For improvement no proposals have been put by the Markets Section to the Local Government. Among other things it is proposed to have a State Cinema and a State service.

Once the advantages of a State Radio service have been accepted and steps are taken to establish and develop it, there seems to be little doubt but that current prices and other market news of such commodities as rice, cotton, groundnuts, beans, sesamum, millets, e, sugar, onions, tobacco, etc., will be regularly quoted.

III. *Regulated Markets in Burma.*

One of the recommendations of the Indian Central Banking Enquiry Committee that regulated markets should be established.

To ascertain the usefulness of these the Burma Government is proposing to consider legislation based on the Madras Market Act of 1933, etc.

The question of regulated markets for rice was discussed by the Burma Rice Export Trade Enquiry Committee in 1936 and the following views were recorded :—

"We recognise the force of the argument put forward, (for the establishment of regulated markets) but feel that in view of the door to door competition for the rice crop and the heavy incidence of indebtedness which leaves so little of the crop available for disposal at will, the prospects of getting cultivators to make use of regulated markets are not great. We have decided therefore to make no recommendation on this point beyond suggesting that the scheme is worthy of further consideration, and possibly experiment on a small scale".

Though the prospects for regulated paddy markets cannot be considered to be particularly bright some scope would appear to exist for regulated markets in groundnut and possibly cotton.

Experimental regulated markets will, therefore, most probably be set up at Magwe and other groundnut centres when necessary legislative measures have been passed.

Cattle markets already exist at all important centres and are generally under the control of local bodies.

Control may be—

(a) Direct, under an appointed Superintendent,

(b) Indirect, through a lessee, or

(c) By licence

Under (c) licences are issued to individuals who controlled private markets prior to the introduction of the reforms of 1921 Licence fees vary considerably and may be as low as Rs. 5 per annum to as high as Rs. 100 per annum plus a tax of 4 per cent on all profits.

As under existing laws all brokers must be licensed a certain amount of control or regulation of cattle markets already exists.

IV. Developing the trade in Agmark products and tightening up the system of inspection in Burma.

As no grading stations [illegible] 'Agmark' products does [illegible] Every assistance will be [illegible] any instructions as to in [illegible] carried out.

V. Exhibition work in Burma

For publicity purposes graphs and diagrams have been prepared by the Markets Section to show the production, value and distribution of such crops as rice, beans, cotton, sesamum, wheat, tobacco, potatoes, groundnut, etc.

These are displayed and demonstrated at the Annual Arts and Crafts Exhibition at Rangoon, and at many districts shows, along with pure crop samples of practically all agricultural commodities.

Competitions are also held for agricultural products, in which the purer or better graded samples are allotted prizes.

The next step will naturally be the demonstration of graded produce, but this development will have to await the introduction of grading.

Exhibition work, if undertaken, will presumably therefore be confined to such commodities as hides and eggs the grading of which is now under consideration. Exhibition work will be based on similar lines to that adopted in Indian Provinces.

VI. Miscellaneous (Burma).

(a) *Liaison with Co operative Department.*—In Burma, as indicated in Market Survey No 21 "Report on the Co-operative Marketing of Agricultural Produce by Producers in Burma" after the liquidation of bankrupt societies following the collapse of the co-operative movement some years ago, a reconstruction scheme was devised in which prepayment in kind was given prominence.

The scheme was sanctioned in December 1935 and up to the present some 370 reconstructed societies have been registered.

It is on these, therefore, that we will have to depend for any assistance from the Co operative Department in establishing grading stations, storage godowns, etc While the Registrar gives us every assurance that we will be given all possible assistance he is of opinion that some time must elapse before it will be possible to hazard an opinion as to the success of these reconstructed societies.

(b) *Experimental work on containers.*—No experimental work on containers, etc, has been attempted but with the early establishment of a small Agricultural Department in the Shan States it may be possible to considerably improve on the containers used for oranges produced in the Shan States and sold in Rangoon.

(c) *Propaganda, etc.*—As the all India report on wheat is not of particular interest to Burma it has not been possible to distribute many copies.

It is anticipated, however, that the demand for the awaited reports on rice, groundnuts, markets and fairs etc, will be considerable

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(*Note by S Harchand Singh, Senior Marketing Officer* [illegible]

[illegible]

the value of the commodities sold in the markets. Moreover *kacha* weights were found of different standard weights in the same village. It was suggested that throughout the State *pakka* weights (Iron) of the following standard should be introduced :—

1 maund.	40 seers.
1 seer	16 chatanks.
1 chatank	5 tolas.

And there should be rules and regulations for checking weights, measures and balances of shopkeepers. The proposal has been accepted by the higher authorities. The standard weights will be manufactured under State supervision ; and a bill concerning the above noted points is being prepared by the Revenue Minister who is holding the portfolio of Development and markets.

(2) *Registration of Kacha Pakka artiyas.*—Some years back orders were passed to have the brokers, working in the cattle fairs registered. When their names are registered, each broker is to pay a registration fee of Re. 1. Register is kept for this purpose in each tehsil and also in the office of the Director of Agriculture. The brokers are registered with the sanction of the Controller of cattle-fairs, based on the recommendations of the Cattle-fair Inspector and Tehsildars. If any broker does any mischief in any cattle-fair, he is given a black mark ; when three black marks are given to any broker, his name is cancelled. If his application is recommended by the concerned officers, his name is registered second time by paying a fee of Rs. 5. If his name is struck off second time and he is again recommended and if the recommendation is accepted by the Controller of cattle-fairs his name is registered third time by charging a fine of Rs. 10. If his name is struck off third time, he is not allowed to work as broker throughout the State. This system proved very useful to make the cattle-fairs popular and to have a good and more satisfactory business. On the same lines proposals were submitted to have the *kacha pakka artiyas* and brokers registered. The concerned authorities have accepted this principle.

(3) *Groundnut.*—Proposals were submitted to adopt means to increase the cultivation of groundnut in the illaqa suitable for its cultivation and thus to minimise its import. For octroi purposes, groundnut should be treated as an oilseed instead of fruit so that the public may have facilities to install oil expellers and may be in a position to compete with other firms working in the adjacent area. The proposals have been accepted.

(4) It was proposed that auction of grain in the *mandi* should be done in rupees per maund instead of seers, chatanks per rupee. The proposals are accepted and in addition to this, the Revenue Minister is arranging to give wide publicity to daily market rates of important commodities in each market, so that the seller may know that he is getting the right price for his produce.

(5) *Market charges.*—Market charges should be fixed and should be uniform throughout the State. The principle is accepted and the details of it are under the consideration of Revenue Minister.

(6) *Auction by open bid.*—A proposal was made to have the auction of cotton by open bid system. The present system as found out in the marketing survey was defective and harmful to the seller. The proposal has been accepted and was brought into operation in certain markets during the last cotton season and in future it is to be enforced in all the markets.

(7) *Wheat.*—During wheat survey it was found out that Maharaja wheat fetched a premium from one anna to four annas per maund over the mixed varieties of wheat in different markets throughout the State. A proposal was made to introduce this wheat in the illaqas where not cultivated so far, and steps have been taken by the concerned authorities about it.

(8) *Rice.*—Rice worth 7 lacs of rupees is imported into the State while there are good facilities in different illaqas for its cultivation. Proposals to increase the cultivation of improved varieties in the State have been accepted and given effect to.

(9) *Tobacco.*—The area under tobacco was decreasing and import increasing ; during the year under survey, tobacco worth about 3 lacs of rupees was imported. Certain difficulties which were experienced by the cultivators were brought to the notice of concerned authorities. The matter is under the consideration of Excise Commissioner and Director of Agriculture.

(10) *Eggs*.—Proposals were made to encourage poultry farming as a cottage industry and also to educate the egg producers either through the itinerant staff of Agriculture department or co-operative societies as to where to dispose of their produce especially in summer when eggs are rarely utilized. The principle is accepted and the proposal is under the consideration of the Secretary to His Highness' Government in Forests and Reception, Patiala, holding the portfolio of Agriculture.

(11) *Fruits*.—Proposals were submitted to increase the area under fruit cultivation on improved system so that import may be decreased and steps have already been taken by His Highness' Government to increase the area under fruits.

the rural sufficient of milk on by the concerned authorities in this connection.

(13) *Hides and Skins*.—Proposals were submitted to start small tanneries as a cottage industry to avoid import of tanned hides. The proposal is under the consideration of concerned authorities.

(14) *Livestock*.—Proposals were submitted to improve the buffalo breed and supply Murrah buffalo bulls in the ilaqa where they are not found at present because during milk survey it was found out that the average quantity of milk yield per buffalo in the territory where Murrah breed is mostly found was 5½ seers per day per animal and in the other ilaqa it was four seers, while attending and other expenses were the same in both the cases.

(15) *Future trading associations*.—The proposal was made to limit the number of future trading associations, and it was suggested that Inspector General of Registration should consult the Senior Marketing Officer when any such body comes forward to get an association registered in future. The Revenue Minister is preparing rules providing necessary safeguards for workers against risk.

(16) *Starting of egg and ghee grading stations*.—About six lacs of eggs are exported from one place—Bassi Pathanan. The export in winter is mostly to Delhi and in summer to Simla. The matter was discussed with the concerned merchants and they were ready to have the eggs graded provided there may be a demand for graded eggs from Simla and Delhi, for which the Agricultural Marketing Adviser has already been addressed.

Als of Patia men hav able fo be con duty is imposed on the export of ungraded ghee. The matter was referred to the Deputy Commissioner of the district for opinion. He has supported the proposal of the merchants to have the duty on the ungraded ghee which may be exported. The proposals are now under the consideration of higher authorities.

(17) *Market News Service*.—At present the wholesale rates of all the important commodities, prevalent at tehsil headquarters, where usually markets exist, are published

hung up in the markets and Tehsil courts for the information of the general public and especially to help the producers who come over there to dispose of their produce.

It is contemplated to circulate these rates in the villages by the itinerant staff of the Agricultural Department.

(19) *Adoption of standard tolerances in case of Wheat contracts*.—The matter has been discussed with all the associations and their directors have shown their willingness to adopt these basis with slight modifications when finally settled and adopted throughout India.

Check analysis of *Agmark* ghee.

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1. Date of collection
2. Sample collected by
3. Place of collection
4. Person from whom collected.
5. *Size of tin.*
6. Grade.
7. Label No.
8. Packing station (in code).
9. Melt No.
10. Name of packing and grading firm.
11. Date sent to the Central Ghee Control Laboratory, Cawnpore.
12. Remarks, if any.

Date. *Signature and designation of the forwarding Officer.*

Report of the analysis.

1. Date of the receipt.
2. Register No.

I. *General Report* with respect to grains, texture, colour, sedimentation etc.

II. *Chemical Report.*

1. B. R. Reading at 40°C.
2. Moisture content per cent.
3. Sap. value
4. R. M. value.
5. Polenske value.
6. Kirschner value.
7. F. F. acids (as oleic acid) per cent.
8. Grade designation.
9. Remarks.

Signature of the analyist.

Memo. No.

Dated

Forwarded to ....

Copy to the Agricultural Marketing Adviser to the Government of India, Delhi.

CIRCULATED PAPER NO. 5

Item 4 of Agenda.—Arrangements for rail statistics.

In June 1936, the Railway Board agreed that the railways might supply, free of charge, to the Marketing Staffs any available data compiled for the railways. The Railway Board had also decided that the Marketing Staffs should pay for statistics which may have to be specially compiled. After a prolonged correspondence they agreed, last year, to authorise the State Railways to incur expenditure, up to a certain financial limit (generally Rs. 2,000) in each case, on the compilation of such statistics. This was sanctioned as an experimental measure for one year at the expiry of which the Agents concerned would submit to the Railway Board, a report showing the benefits that have accrued or are expected to accrue from these statistics and from the activities of the Marketing Department. Similarly the Agents of Company-owned railways also agreed to supply the requisite particulars up to a certain financial limit.

Soon after this the Marketing Staffs in provinces and major States were asked to forward their demands for rail statistics, which after scrutiny by the Central Marketing Staff, were passed on to the railway administrations concerned While some of these railways have, it is understood, commenced supplying the requisite particulars, others have found it difficult to do this within the amount agreed upon. For instance, the Agent, Madras and Southern Mahratta railway has intimated that the cost of compiling the required data, which have already been reduced to the minimum, would exceed the sanctioned sum (Rs. 2,000) by Rs 1,500. The North Western railway authorities also report that the total cost of compilation would be slightly in excess of Rs. 2,000 The question therefore arises as to how this excess expenditure is to be met or the statistics reduced still further, also that railways might be moved to consider how far their existing arrangements for maintaining rail statistics could be modified to suit the requirements of the Marketing Department

Arms, Ammunition, Explosives and Military Stores—*contd.*

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